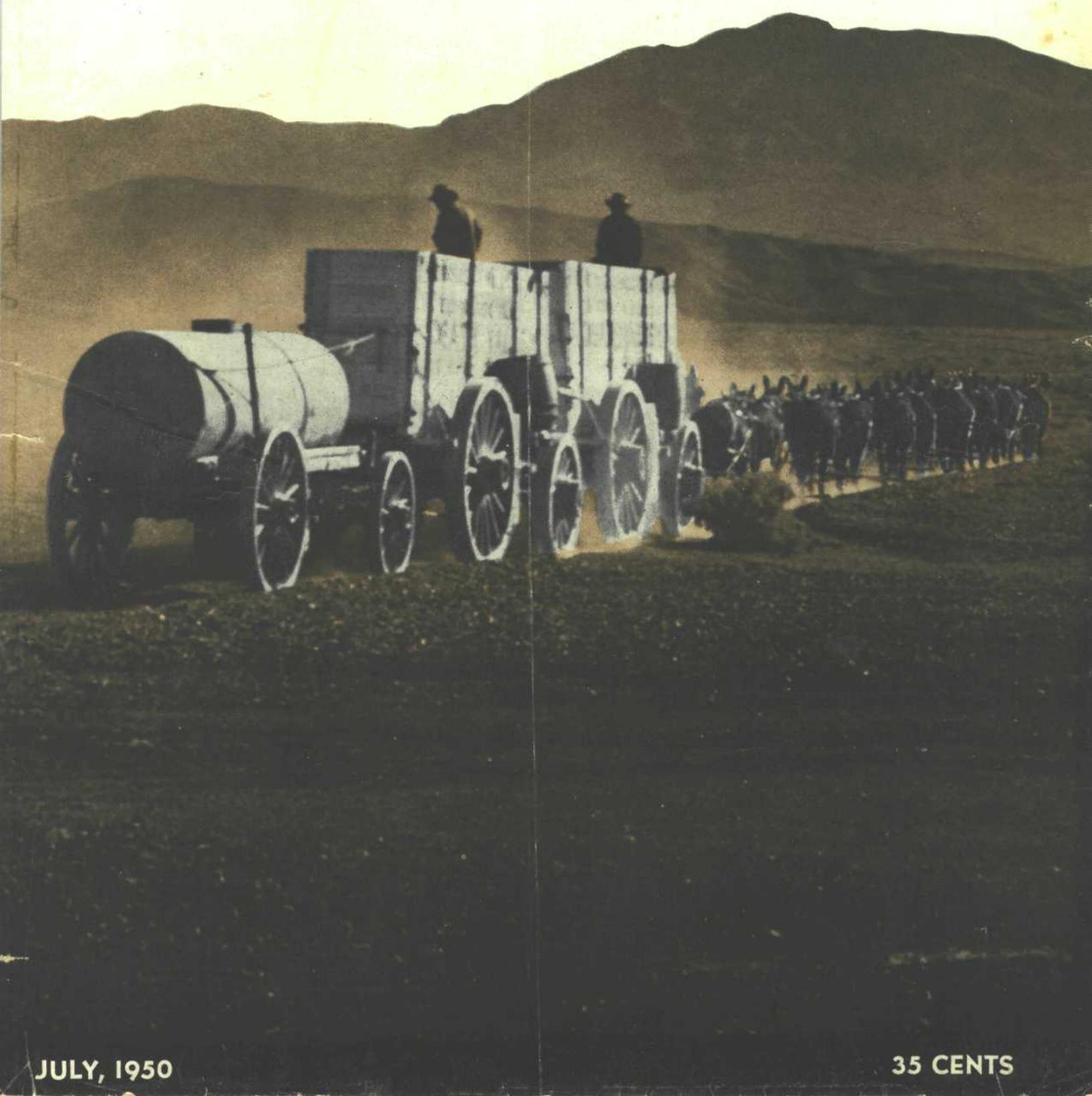


THE *Desert*
MAGAZINE



JULY, 1950

35 CENTS

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When you wear jewelry set with TITANIA. After years of experiments, synthetic Rutile is now available in facet cut brilliants. This magnificent substance has been given the name of "TITANIA."

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SUBSTANCE	INDEX OF REFRACTION	CHROMATIC DISPERSION
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EMERALD	1.564 - 1.590	.014
RUBY, SAPPHIRE	1.760 - 1.768	.018
DIAMOND	2.417	.063
TITANIA	2.605 - 2.901	.300 (APPROX.)

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DESERT CALENDAR

June 28-July 1—Lehi Roundup, J. Ferrin Gurney, secretary, Lehi, Utah

July 1-3 — Three-day Rodeo, Silver City, New Mexico.

July 1-4—Desert Peaks section of Sierra club will climb Mt. DuBois and White Mountain peak in California.

July 1-2-3-4—Reno Rodeo, Parade, races, all rodeo events. Roy Peterson, chairman. Reno, Nevada.

July 1-4—Frontier Days and Rodeo. Parades, rodeo events, square dancing. Prescott, Arizona.

July 1-4—Seventeenth annual exhibition of Hopi craftsmanship. Museum of Northern Arizona, Flagstaff.

July 2-3-4 — Southwest All-Indian Pow-Wow, daily parades and nightly dances. Indian rodeo each afternoon. Photographers welcome. Flagstaff, Arizona.

July 2-5—Apache Devil dance, on the Mescalero Indian reservation northeast of Alamogordo, New Mexico.

July 3-4—Bit and Spur Rodeo, Tooele, Utah.

July 4—North Ogden Cherry Days, North Ogden, Utah.

July 4—Cimarron Rodeo, sponsored by Maverick club, Cimarron, New Mexico.

July 4—Lions Club Rodeo, Gallup, New Mexico.

July 4 — Douglas celebration and Cavalcade, Douglas, Arizona.

July 4-5—Showlow Rodeo, Showlow, Arizona.

July 4-8—Annual Horse show, A. P. Fleming, manager, Ogden, Utah.

July 13-14-15—Harvest Days, Midvale Kiwanis bowl, Midvale, Utah.

July 13-15—Annual Ute Stampede, Nephi, Utah.

July 14 — Annual Feast Day and Corn dance at Cochiti pueblo, New Mexico.

July 15-16 — Round Valley Rodeo, Springerville, Arizona. J. L. Briggs, chairman.

July 19-24 — Annual Pioneer Days celebration, Ogden, Utah.

July 19-24—"Days of '47" observance, Salt Lake City, Utah.

July 21-22-24—Fiesta Days, Clyde Hicken, secretary, Spanish Fork, Utah.

July 24—Mormon Pioneer celebration, Safford, Arizona.

July 25 — Santiago's Day at Santa Ana and Laguna pueblos; Corn dance at Acoma pueblo, New Mexico.

July 25-26—Annual Fiesta and Corn dance at Taos pueblo, New Mexico.

July 27-28-29 — Robbers' Roost Roundup, Price, Utah.



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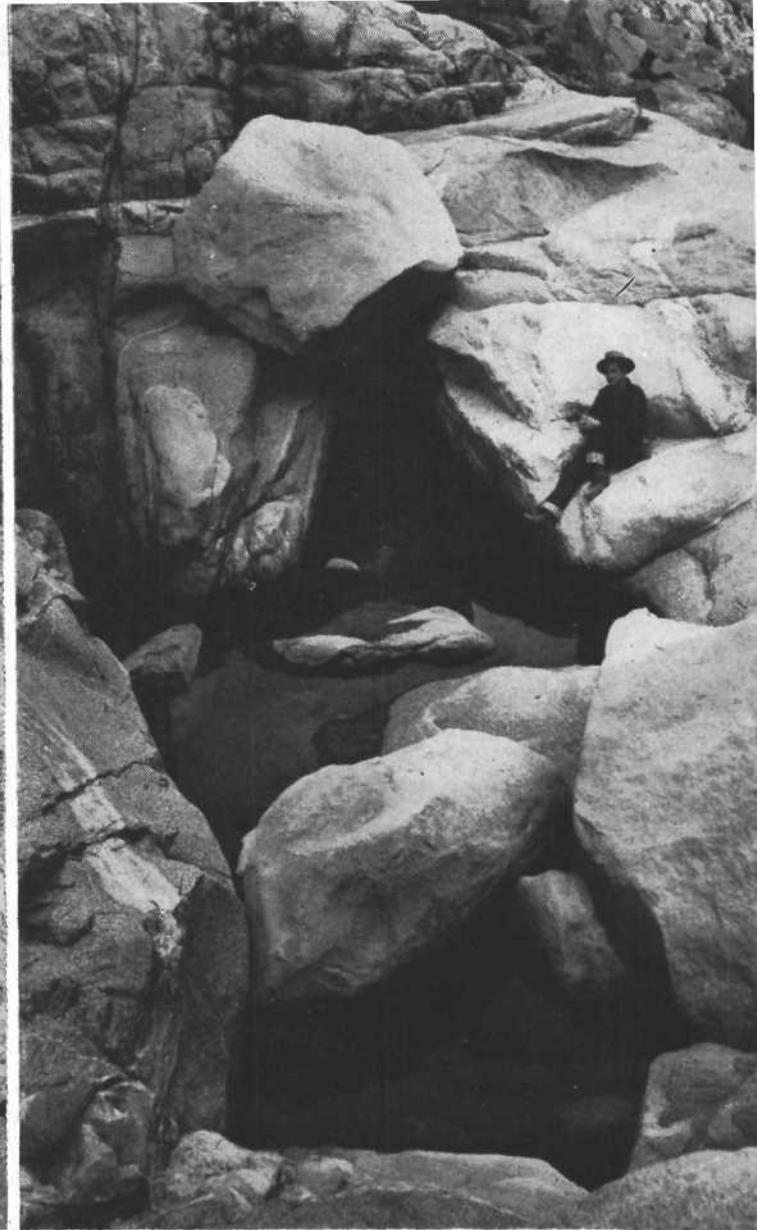
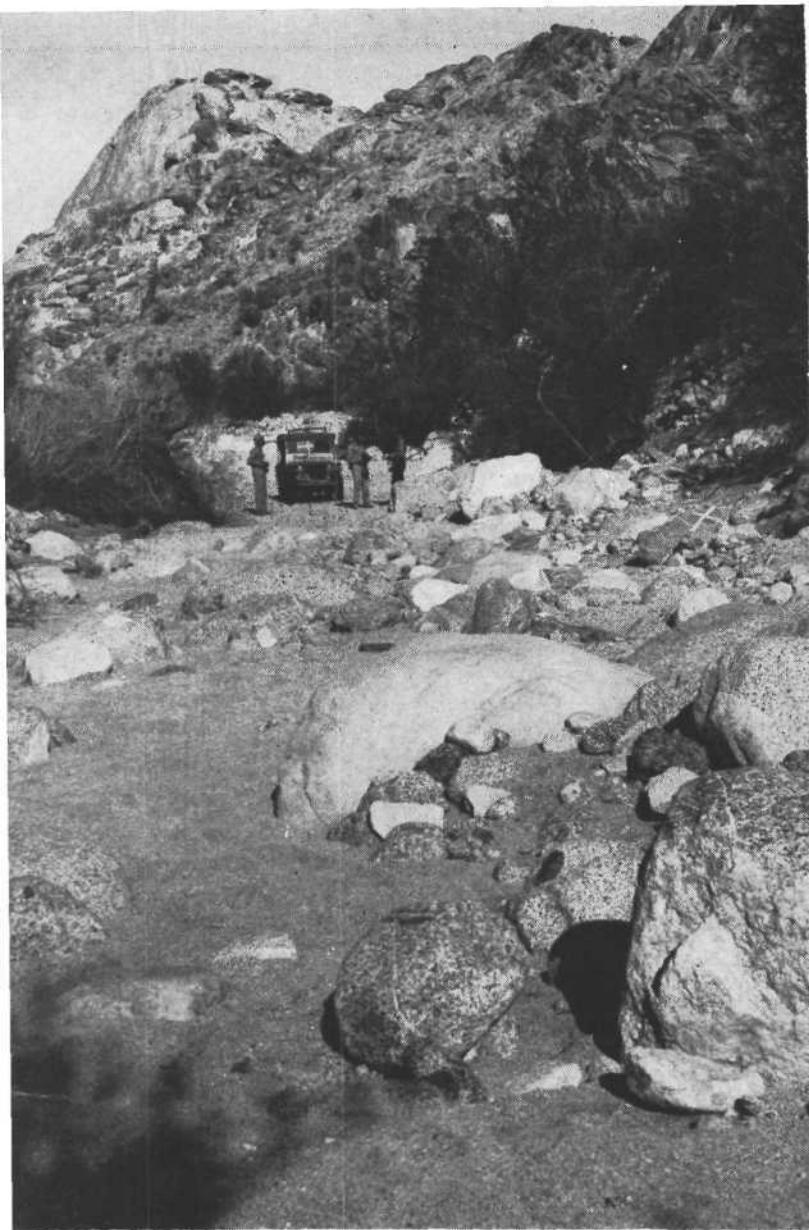
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When the boulders became too large for the jeep, we stopped and made camp for the night.

Bill Sherrill beside one of the two tinajas discovered among the rocks of the dry cascade.

La Mora Canyon in Baja California

After a recess of many months, Randall Henderson is exploring the canyons again, looking for the wild palm oases which are hidden deep in the desert wilderness of the two Californias. He and his companions found the palms they were seeking — and also the cave dwelling of a prehistoric Indian family — probably the only humans ever to inhabit this remote place.

By RANDALL HENDERSON

ONE EVENING in February this year four of us camped among the rock at the entrance to La Mora canyon in Baja California. We had driven our two jeeps up the arroyo until the boulders became so big they blocked further progress. There we cooked our potatoes and corned beef and spread our bedrolls for the night.

La Mora is one of a dozen or more palm canyons which drain the desert slope of the Sierra Juarez range just south of the international border. Some of these canyons — Guadalupe

with its gushing hot springs, Tajo with an estimated 4500 native palm trees, Palomar where the ancient Indians left their scrolls on the rocks, and Canon de las Palmas Azules, canyon of the blue palms — these have been described in previous issues of Desert Magazine.

They are precipitous canyons, with springs or flowing streams of good water. There are palms in all of them, and abundant evidence that prehistoric Indians occupied them. Manuel Demara, who has run cattle on the bajada at the base of the Sierra Juarez for half a century, once told me there were wild Indians in some of the canyons as late as 1903.

On a previous trip into this little known region, Arles Adams and I had spotted La Mora canyon from a distance, and agreed that some day we would explore it. We did not know the name of the canyon then. This is unsurveyed terrain, and there are no complete maps of it.

In January this year, Arles wrote that he was ready for the trip. We set the date for February and invited Bill Sherrill of the U. S. Border Patrol and Walter Gatlin to accompany us. Both men have been our companions on previous jaunts into the Baja California country.

We crossed the border at Mexicali at noon on Saturday. The Mexican border inspectors waved us on with little formality for we carried special permits issued through the courtesy of the Mexican Immigration Service. This was a reporter's expedition, and we carried no firearms.

It had been nearly two years since my last trip into Baja California and I was agreeably surprised at the improvements in progress. Mexicali has grown to a city of 40,000 people, and under the direction of a young and progressive governor, Alfonso Garcia Gonzales, important highway construction is underway.

A paved road is nearing completion from Mexicali to the Gulf of California, 140 miles to the south. This highway will provide motorists and sportsmen with a fast road to the renowned Totuava fishing waters of the historic Sea of Cortez, as the gulf once was named.

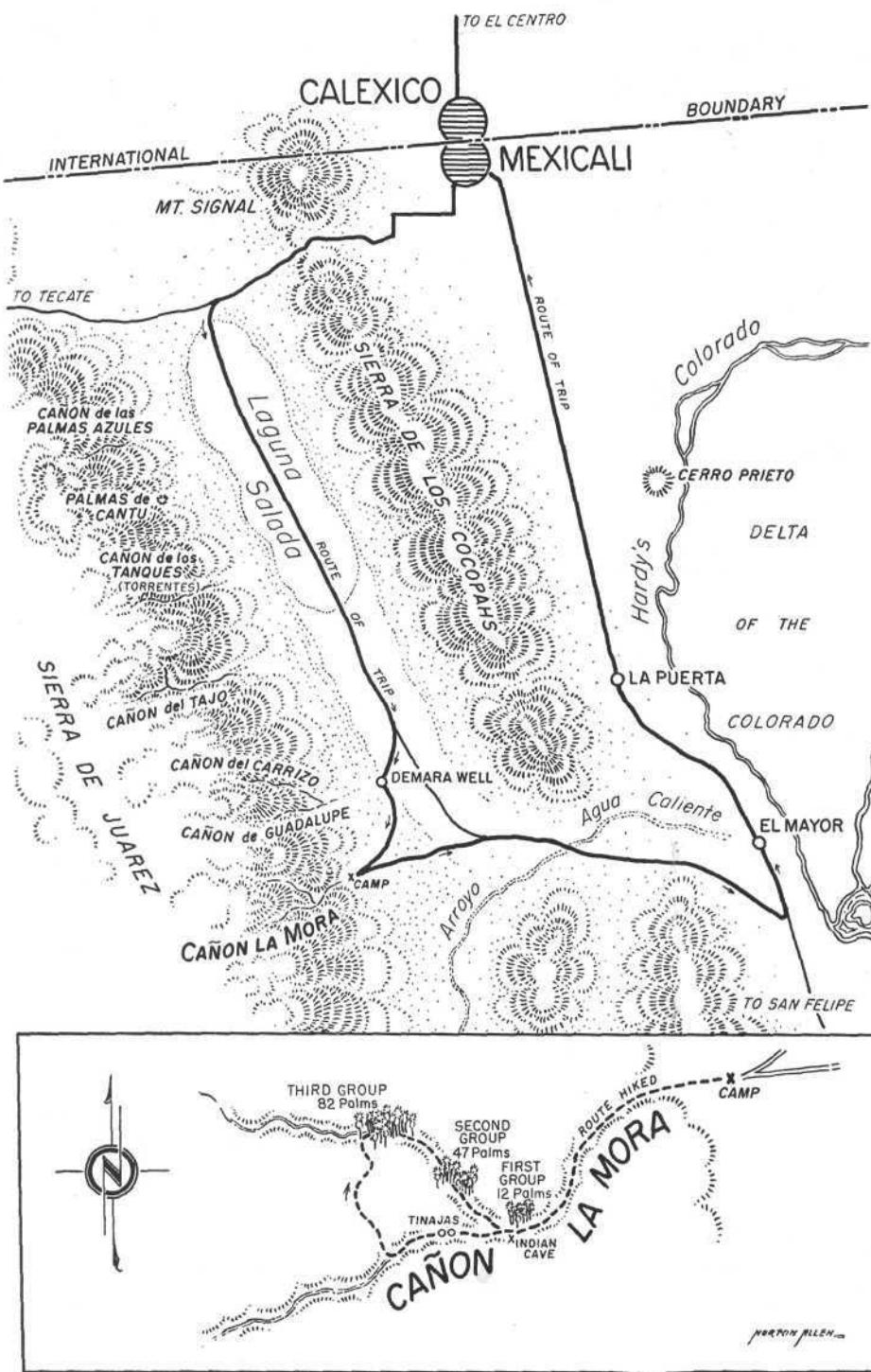
No less important is the new highway along the Mexican side of the border from Mexicali through Campo and Tecate to Ensenada on the Pacific coast. The rocky Cantu grade which zig-zagged up the desert face of the Sierra Juarez with a series of hairpin turns, is being replaced with a well-engineered grade that is nearing completion. All along the route bulldozers are cutting and filling to make a roadbed which promises smooth fast travel for motorists within another year.

The new grade is still rough, but we were able to follow it in our jeeps to Mt. Signal pass where we turned south across the great dry basin of Laguna Salada.

Our immediate destination was Demara Well, where we hoped to get information regarding the canyon we were to explore. The veteran cattleman Manuel Demara was not in his little adobe cabin. Four Mexican vaqueros there told us he was up in Guadalupe canyon doctoring his rheumatism at the hot springs. We could see the mouth of the gorge which was our goal, 12 miles to the southwest. The vaqueros told us it was La Mora canyon. They did not know the origin of the name.

Three palm groups were found in La Mora Canyon, the upper group (center picture) was burned in recent years, probably by lightning.





Leaving cattle camp we followed the truck ruts of Mexican wood-cutters along the edge of the old lake bed where there is a dense growth of mesquite, and then headed up the arroyo that led to the mouth of La Mora.

We were climbing gradually across a great bajada covered with a luxuriant growth of desert vegetation—palo verde, ironwood, ocotillo, bisnaga, buckhorn cactus, smoke tree, catclaw and creosote. The palo verde and ironwood trees carried great masses of the leafless desert mistletoe.

As we approached the base of the

Sierra Juarez with the V-gash of La Mora canyon always directly ahead, the heavy sand required all the power our four-wheel-driven vehicles could muster.

We were able to navigate the sand, but near the mouth of the canyon we encountered great drift-piles of boulders—and that is where we camped. The canyon would be explored on foot tomorrow. It was a perfect camp—mild temperatures and an ample supply of dead palo verde for the fire.

At the campfire that evening Sherrill related his own and the experi-

ences of other patrolmen whose duty it is to cover the area north of the border in quest of aliens who have crossed the line without proper passports. Hardly a day passes when they do not pick up from two to 50 illegal entrants, most of them Mexicans who have crossed into the United States along the unfenced border to seek employment at higher wages than are paid in Mexico—"wet Mexicans" is the common term for them. American employers, as a rule, give the patrol officers little cooperation, for they can always get these illegal aliens to work for less than the prevailing wage.

While the Mexicans use every possible ruse to elude the officers, they give little trouble when taken in custody. Generally, they do not speak English, and since the only penalty that can be enforced against them is to put them in a prison compound for a few days and then deport them to Mexico, they are docile prisoners.

We were up at daybreak the next morning, and with light backpacks that included lunch and water we set out to discover what was beyond the first bend in the canyon—and the bends beyond. For the torrents of water that gouge out the desert canyons never flow in straight lines. They rebound from wall to wall—and persisting in this course for countless ages eventually they carve for themselves a serpentine trail.

For the hiker who is interested in the geology and the botany, and the life of prehistoric tribesmen who may have dwelt here, every turn in the canyon is a new adventure.

Our first bend brought us into a scattered forest of elephant trees. I had been watching for this tree, so common to the desert of Baja California. Our camp was at an elevation of 1050 feet, and we reached the zone of elephant trees at 1200 feet. They are low-growing trees, seldom over 15 feet in height, with thick tapering trunks and tiny leaves shaped like miniature palm fronds.

Soon after leaving camp we knew there were native palms somewhere up the canyon. We found bits of broken fronds in the piles of driftwood lodged behind boulders. But we were two miles from camp before we caught sight of the first palm oasis. It was a small group—just 12 trees growing in a cluster on the slope above the floor of the canyon. Three of them were tall veterans whose fronds had been burned, probably by lightning. The smaller trees wore full skirts of dry leaves.

There was no water on the surface here, but a thick deposit of travertine below the palms told the story of a flowing spring which once had gushed

from the sidehill above. Obviously, the water was still close to the surface, otherwise the palms would not have survived.

A quarter of a mile beyond the palms the canyon forked and we were uncertain as to which was the main water course. At the junction was a cave formed by two great boulders which had rolled down a tributary canyon and lodged together in such a position as to provide shelter. Indians had once lived in this cave. There were three mortars in flat boulders at the entrance, and on a desert varnished wall of rock opposite the cave were a score of petroglyphs. They were barely discernible, and we traced them with chalk in order to make photographs. Probably there was running water in this canyon when the aborigines camped in this little cavern.

We continued up the left fork, climbing the face of an ancient cascade of slick granite. No stream tumbles over this rock face today, except when there are rains, but we found two large tinas with good water as we worked our way up the precipitous waterfall.

At the top of the dry cascade the canyon levelled off and we followed the fresh tracks of a cougar along the sandy floor of the canyon. Probably it had come down to the upper water hole for water—and perhaps for a meal, for the sand was pitted with the tracks of smaller animals.

We continued along this fork far enough to make sure there were no palms beyond, and then climbed the ridge on our right and descended into the right fork of the canyon. Our search for palms was well rewarded here, for we reached the bottom of the canyon in a pretty little oasis of 82 Washingtonias—all except two of them having lived for 50 to 75 years without having their fronds burned.

There was a small seepage of water, and we stopped and ate our sandwiches in this lovely cluster of palms. A canyon wren serenaded us as we lolled in the shade before starting the descent of this fork.

We had nearly reached the junction where the Indian cave was located when up on the side of the canyon we counted 49 palms in a third oasis. There was a great block of travertine here, and among the rocks at the bottom of the canyon below the palms was a spring with a trickle of water that disappeared in the sand 50 feet from where it bubbled out of the rocks. Eleven young palms grew along this little stream.

Our total count for the day was 143 palms—all of them Washingtonias of the filifera species, the same palm found in the canyons of the Southern California desert. Guadalupe canyon,



In the largest oasis only two surviving palms of an older generation had been burned. The others wore their full skirts of dead fronds.

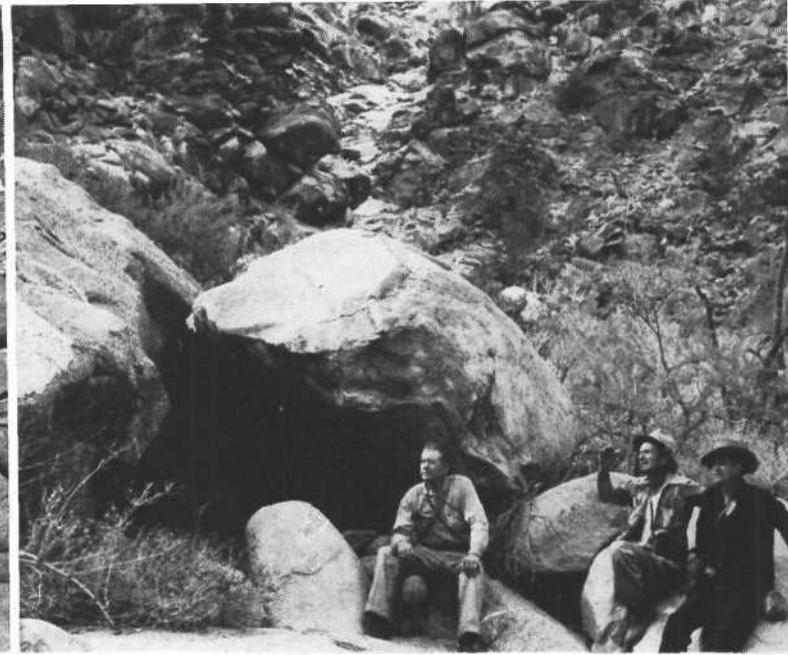
a few miles to the north, and Palomar canyon 12 miles to the south have both the filifera and the blue palm, *Erythea armata*, but I saw not one of this species in La Mora.

There had been little rainfall in this area during the winter for we saw few wildflowers in blossom, mainly purple lupine. Chuperosa was in blossom—but it blooms every month of the year whether it rains or not.

By mid-afternoon we were back at camp, and since there was ample time,

we decided to return to Mexicali by way of El Mayor so I could give Desert Magazine readers a report on the progress of the new Mexicali-San Felipe highway which has been under construction the last two years.

Thousands of bisnaga cacti grow on the bajada and on the lower slopes of the Sierra Juarez, and since Mexico has no laws regarding this plant we took time on our return from the hike to open one of these spiny water barrels to settle—for our own satisfac-



New Desert Highway to the Gulf

After many years of planning and two years of construction work the new 140-mile surfaced highway from Mexicali on the California border to the fishing village of San Felipe on the Gulf of California is nearly ready for the motorists.

On May 1 only 20 miles of black-top surfacing remained to be installed and Governor Gonzales of the Northern District of Baja California promised that the road would be ready for motor travel within 60 days.

To accommodate the large numbers of American motorists and fishermen who are expected to visit the gulf fishing port a comfortable hotel has been built at San Felipe, and boats will be available for rental at San Felipe harbor.

At the present time there is a span of more than 100 miles of this highway, from El Mayor to San Felipe, where no gasoline or water are available. Additional service will be provided as travel on the new road increases.

The Gulf of California is famed for its good fishing. But over the old road it was a gruelling 12-hour motor trip which few drivers cared to face. With completion of the new road it will be an easy 3-hour drive from Mexicali.

Tourist permits for going into Mexico may be obtained from any Mexican consul, or from the Mexican immigration service at the Calexico-Mexicali border.

One of the thousands of elephant trees found growing above the 1200-foot elevation.



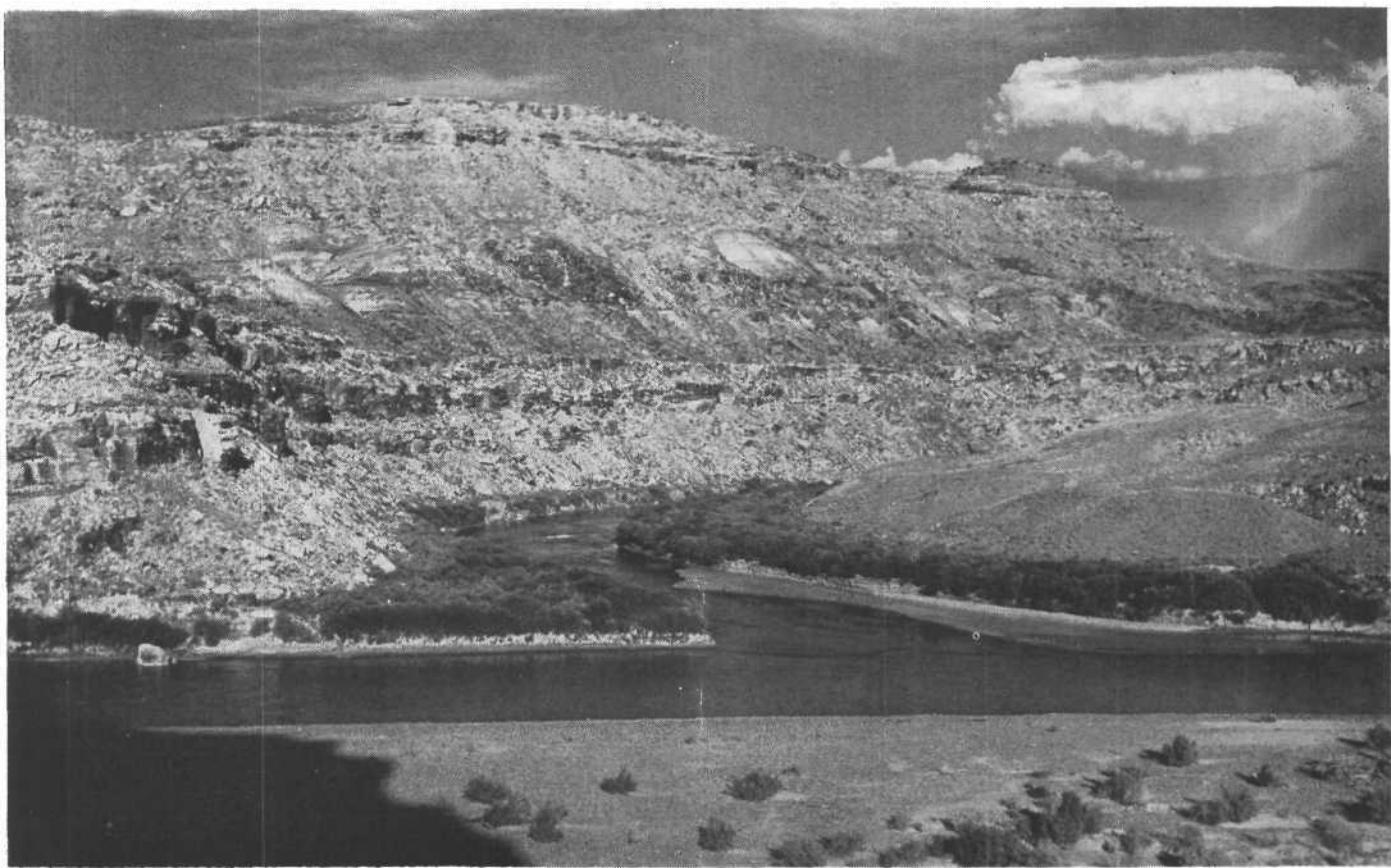
At the junction of the canyons was a prehistoric Indian cave with grinding holes in the rocks—and on the opposite wall were petroglyphs left by the tribesmen. The glyphs were chalked before taking this picture. At the entrance to the cave, left to right: Walter Gailin, Arles Adams and Bill Sherrill.

tion — the long-standing controversy as to the amount and quality of the water which a thirsty man would be able to obtain from it. The story of our experiment was told in Desert Magazine last month.

La Mora is not one of the largest of the canyons which drain into Laguna Salada from the eastern slope of the Sierra Juarez, nor has it as many palms as some of the others. Nevertheless, it does have three delightful little palm oases, and an abundant stand of Lower Sonoran zone vegetation.

This was one of the few field trips I have taken in the Southwest when I spent an entire day without seeing any trace of previous visitors—that is, excepting the ancient tribesmen who had dwelt here. The Mexican vaqueros never come to this canyon because its waterholes are inaccessible to cattle. Probably Mexican prospectors have come this way—but we saw no tin can nor a blackened rock nor a “coyote hole” to prove they had been here. La Mora has slumbered down through the ages — since its Indian family departed—in complete solitude.

Here is one place on the face of the earth where the hundreds of little animals which left their tracks in the sand probably will live out their lives without ever hearing the blast of the white man’s firearms—weapons which perhaps have become more of a curse than a blessing to the men who perfected them.



After its turbulent course through the canyons and gashes of the Colorado plateaus, the Dolores flows quietly into the Colorado at this junction, one of the most beautiful spots along the great River of the West. Photo taken from Agate Hill.

Rocks Where the Rivers Meet . . .

With a veteran rock collector and lost mine hunter as a guide, Harold Weight followed a winding dirt road that led to Agate Hill in eastern Utah—and there found a precipitous mountainside covered with broken jasper of varied and beautiful coloring. They also found a perfect vacation campsite for those who like to loaf and fish. The locale of this story is the fabulous desert wilderness of southeastern Utah—a region featured in many past issues of *Desert Magazine*.

By HAROLD WEIGHT
Photographs by the author

"**T**HAT ROCK comes from a pretty place," Bill Henneberger told us as we admired his pieces of bright jasper. "It is from Agate Hill in eastern Utah, where the Colorado and Dolores rivers come together. I collected it when I was down at Dewey bridge, repairing placer mining equipment."

We were looking over Bill's rocks at his home in Grand Junction, Colorado, and planning possible field trips. Agate Hill sounded promising and Bill assured us there was plenty of the jasper. It was gratifying to

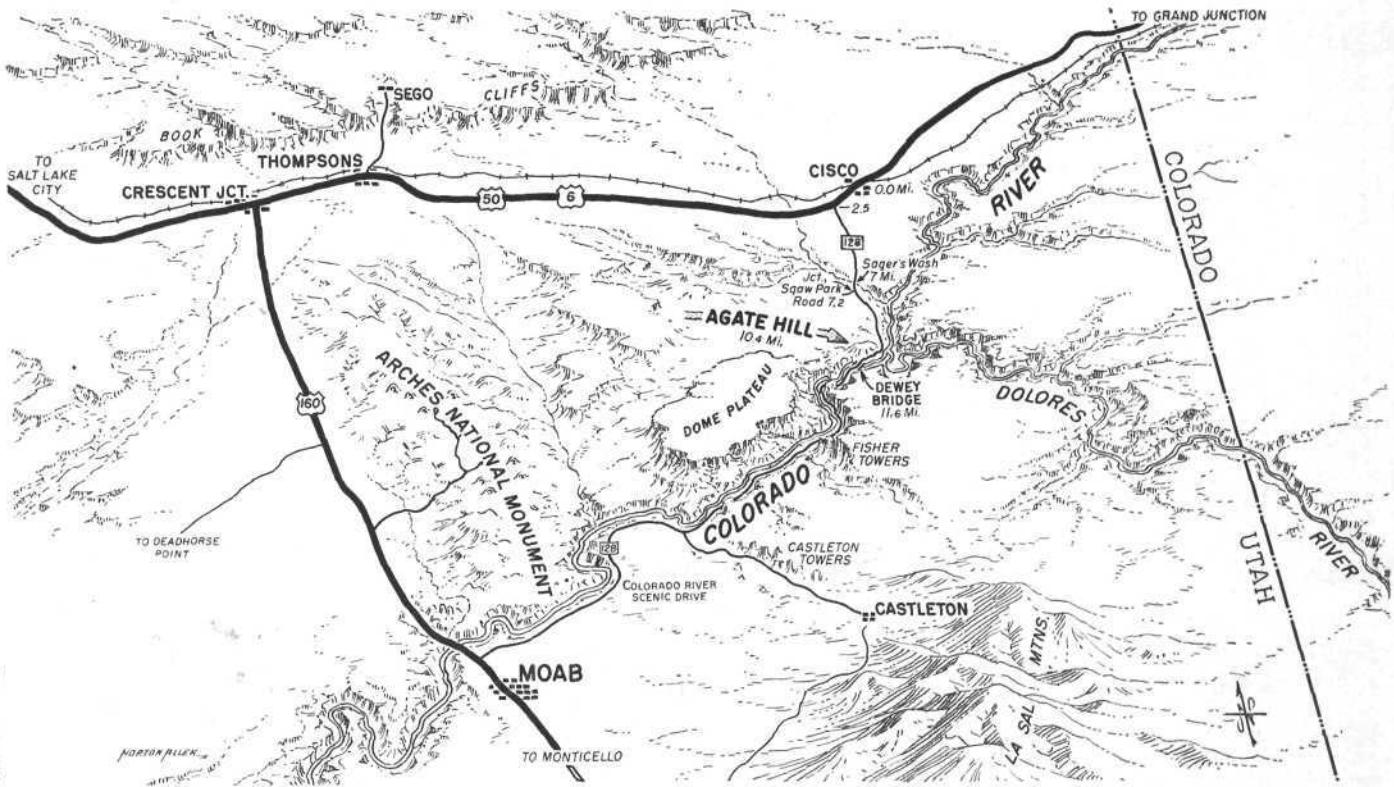
know a good dirt road, used daily by the Cisco-Moab mail carrier, passed the field—but it was also disillusioning to me. I had always pictured the junction of the Colorado and the Dolores as remote and inaccessible.

While we drove along Highway 6 and 50 toward the Utah border, Bill Henneberger, who has prospected and hunted rocks as a hobby since he came West in 1916, told us of his first visit to Agate Hill. His present work as a machinist, including repair of mining and milling equipment, sometimes takes him on business to places

where rockhounds could spend happy vacations.

A broken winch which had been used to haul a placer gold recovery machine through the river brought him to the junction of the Colorado and Dolores in 1944. From Bill's description, it must have been quite a gadget. A cable had been anchored on either side of the Colorado, and a generator and electromagnets were dragged back and forth on the floor of the river on it. The generator was in a "sort of submarine" with pipes sticking above the water. Apparently the machine depended upon setting up magnetic fields which would attract the black iron sands, then trap the fine gold and other minerals of great specific gravity in the iron held by the magnetic fields.

If that sounds complicated you should see some equipment for recovery of fine and flour gold. Everyone with an inventive turn of mind seems to have worked on the problem. In 1936 the *California Journal of Mining and Geology* estimated 7000 such devices had been patented. Some are simple, others unbelievably complex. Some work fairly well, some are worthless. The Colorado River sands have been the testing ground—and graveyard—for many.



While repairing the winch, Bill saw the colorful jasper and agate chunks around the old cabins where the miners lived, and learned where they had been found. He stopped to collect some on the way out.

He has another hobby. He is an avid lost mine and buried treasure fan and has collected all available information about many of these bright legends of the West. He has searched for several—including Southern California's Lost Pegleg—sometimes with the aid of his M-Scope.

"There's a railroad station called Sagers up ahead, about five miles west of Cisco," he said. "Once a Japanese cook worked there and according to the story he had a lot of money, all in silver coin. When he was alone, two Mexican workers tried to force him to give up his money. They killed him when he refused, but they didn't find his coin, and neither has anyone else. Folks think he must have buried it near by. But I went over every likely place with my detector and didn't get an indication."

I've been interested in these locators since the war when I operated a similar but more sensitive airborne device designed to spot submerged submarines. I had never seen one of the little metal detectors in actual service, so I questioned Bill regarding their usefulness.

He grinned. "It certainly detects metal. About 44 years ago there was a train robbery near Grand Valley. A chest of gold coin was carried off by the robbers, lashed between the

saddle horn of two horses. They carried it across the Colorado River, and are supposed to have buried it by three big cottonwoods about 200 yards below the present bridge. I didn't find any gold coin when I tried my detector there, but I did locate stove plates, truck wheels and a lot of other scrap. Even the black iron sand in the river bars gave me strong indications!"

Our last chance to check gas, oil and supplies was at Cisco, Utah, about 55 miles from Grand Junction. Zeroing our speedometer there, we continued on the main highway west for 2.5 miles, then turned south on State Highway 128. This is the Colorado

River road, reaching the river north of the Dolores and following it to Moab along red cliffs and through green bottom-land.

Utah State Guide lists 128 as: "Not recommended for squeamish drivers or timid passengers, impassable in winter and during spring floods." The road has been improved since that was written, but wise motorists will check its condition at Moab or Cisco before attempting a through trip. However from the pavement to Dewey bridge it is an excellent desert road when dry.

"But if it rains," Bill warned, "it gets as slick as grease." He added, comfortingly, "If it doesn't rain enough to soak through you might get out in a couple of hours." Anyone who has slid purposelessly—and apparently in at least four directions at once—on a wet Utah clay road will need no additional warning.

The road made its first branch just across Sagers wash—posted "Dangerous in flood"—and 7.2 miles from Cisco. We kept left. This is in Utah's uranium boom country, and the right branch leads to Squaw Park mining district where carnotite and vanadium claims are being worked.

As we neared the Colorado, Bill pointed out the picturesque ruins of a log cabin under cottonwoods to the left. "Quintus Cato homesteaded there in 1908," he said. "He was the one who started the placer mining down by Dewey bridge. Philip McCarey owns that ranch now."

The Colorado river came in sight on our left and the road narrowed, wind-

DEWEY BRIDGE LOG

00.0	Cisco, Utah. Approx. 55 miles west of Grand Junction, Colorado and 236 miles east of Salt Lake City on U. S. 6 & 50. Follow U. S. 6 & 50 southwest to
02.5	Junction with Utah State 128, the Colorado River road. Turn left (south) on 128. Dirt road, slippery in wet weather.
07.0	Cross Sagers wash, "Dangerous in flood."
07.2	Road Y. Keep left. Right branch goes to Squaw Park mining district, uranium and vanadium.
08.0	Abandoned log cabin (left) marks old Cato homestead.
10.4	Agate Hill collecting area, right; junction of Colorado and Dolores rivers, left.
11.6	Dewey suspension bridge — Limit four tons. (Moab 35 miles.)



William C. Henneberger, who first collected Agate Hill cutting material in 1944 after repairing mining equipment on the river below, points to an outcropping of the yellow-red-purple jasper.

ing between the water and high reddish cliffs. Tamarisk and arrowweed lined the stream edge and as we rounded a curve pheasants in the road scattered and took off in low whirring flight across the river. Driving the last twisting section before reaching Agate Hill, we were absorbed by the quiet beauty of the river and its canyon.

The occasional gravelly banks and small sand bars, the deep shadow of the shimmering green cottonwoods were so inviting we started planning a return trip when we could spend leisurely days here. We would hike up tributary canyons, fish in smooth flowing water, relax under trees or on sunny sand, and watch the wildlife that concentrates around water in the desert.

As we rounded a sharp bend, the canyon opened up and Bill said: "We're here! Look to the right. There's a bench mark at the back of that big boulder. Stop just beyond it and we'll climb that slope."

When Bill sets foot in a rock field, he soon disappears over the hill, leaving even seasoned rockhounds panting. He's also something of a mountain goat. So it was not too surprising that the "slope" was a precipitous mountainside where we looked up and up

at a series of striking formations.

Then we were scrambling up, over and around large boulders, apparently of limestone. Among them we found chunks and boulders of jasper matching that in Bill's collection. Red, yellow and purple was the predominate combination. The most distinctive patterns were yellow and purple with tendrils and feathers of Chinese red. The best specimens had all three colors in fine moss.

We were elated by the size of some pieces, but soon discovered that many of the bigger ones were fractured and that their centers often were not as good in color or texture as the smaller chunks. We continued to climb until we reached an overhang under which excavations apparently had been made. A good deal of the jasper had been removed here. Some of the ledge contained minute quartz crystals and calcite, and the quality did not seem as good as that below.

From our perch at the base of the overhang, Bill pointed to the valley below, where a cottonwood oasis sheltered weathered cabins. "That's the ranch where I stayed while fixing the winch. An old fellow named Parker lived there and operated the placer. It was originally homesteaded by Frank Hatch about 1900, and now it's owned

by Lester Taylor of Moab."

It seemed a perfect picture of frontier Utah—the old log cabins almost hidden under the cottonwoods, the green meadowland circled by towering reddish cliffs, the two rivers mingling smoothly into a great silver band at the cliff base. And over it all the crisp blue sky was alive with hurrying white clouds. Frank Hatch knew how to pick a homesite!

By the time we had sampled the jasper, the entire hillside was in shadow. We wanted to see and photograph the Dewey suspension bridge, so we drove on. Before we reached the slender span, Bill pointed out a gasoline power shovel across the river, recalling his second visit to the area a few months before.

A number of outfits have attempted to mine placer gold in this area. Quintus Cato is supposed to have been the first—in 1908—and also the most successful, having recovered \$10,000, most of it from one pocket. The latest is the Cisco Mining company, and they bought the power shovel from the S and M Supply company for which Bill works. The big shovel was hauled to the bridge on a low semi-trailer, but obviously couldn't be carried across. So it forded the Colorado under its own power, but broke a



The old Hatch homestead—log cabins under the cottonwoods—is a landmark for the collecting field, right foreground. Dewey bridge is to the right of the sandstone headland, center right. Many attempts to reclaim fine placer gold have been made along this stretch of the Colorado.

clutch shaft part way up the opposite bank. Bill made a new part for the shovel, brought it down and installed it, then drove the big machine out of the river.

Bill learned the machinist's trade in Pennsylvania when he was 17 and first came to Grand Junction to work in the Denver and Rio Grande Western shops. When they put him in the round house, he quit in disgust and picked apples until he earned his fare back East. Once there he missed Colorado so much that he rode a freight from Chicago to get back. Enlisting from Grand Junction, he served through World War I in the navy as aviation mechanic.

He is especially fond of his present job because of the variety it affords. He has gone high into the Colorado mountains in the winter snows to dismantle old mills at Silverton and Leadville, and into the Utah desert heat to work on balky compressors in the carnotite mines. But this does not furnish enough outdoor life for Bill. In the winters he loads an old pickup, equipped with metal cabin, bed and stove, and takes off for a rockhunting and fishing expedition in the southern deserts.

When we reached the Dewey bridge and saw the four-ton limit, we esti-

mated the truck's weight, our own and the load of rocks and camping equipment in the back. There seemed a fair margin of safety so we set the wheels on the single track. The bridge was a bit agitated by our passing, but didn't let us down.

This bridge is one of the two which cross the more than 400 miles of Colorado river separating what we call the Utah strip from the rest of the state. The other is at Moab. The Arizona strip, cut off by the Colorado river in the northwest corner of that state has been widely publicized. This southeastern corner of Utah, isolated by the same river, is just about as large and has a much greater population, including the towns of Blanding, Monticello and Moab.

There was little time to explore at Dewey and, having photographed the bridge, we turned back. It was nearly dark when we reached Agate Hill again, but I wanted to stop for a last look at the two rivers.

Only since 1921 has there been a junction of the Dolores and the Colorado. Before then, it was the Dolores and the Grand with the Colorado coming into existence where the Grand and the Green joined. The Grand, famous among early mountain men and explorers, was renamed the Colo-

rado by Congress and the states involved when stream measurements proved the Green to be tributary to it.

Probably mountain men camped and trapped beaver at this spot. But none of them—Bill Williams, Rubidoux, Fitzpatrick or the rest—left much more than a depleted beaver population to show where they had passed. The early westward travelers seemed to have missed the junction. Escalante and Dominguez, in 1776, crossed the Dolores miles above this point. Branches of the Old Spanish Trail, followed by New Mexican traders to California in the 1830s and 1840s, apparently forded the Colorado to the north and south. The later main routes of emigration were to the north.

The pioneer river adventurers favored the Green over this branch, and there is only one early trip on record down the Grand from Grand Junction through to the Green. That was made by F. C. Kendrick in 1889, when he surveyed for the railroad. Frank M. Brown dreamed of constructing at river grade through the Grand Canyon to the Gulf. The Dolores resisted whitewater boatmen until 1948 when a trip from near its source to the junction was completed by Mr. and Mrs. Preston Walker of Grand Junction and

Otis and Margaret Marston of Berkeley. They used a cataract-type boat built by the late Norman Nevills and reported the Dolores more turbulent than the Snake or Colorado rivers.

As I watched from the slope of Agate Hill, dusk poured into the little valley and the rich black shadows of the cliffs were heavy on the bottom lands. The old log cabins vanished under the cottonwoods. The thread of road, last evidence of human workings, became indistinct. Across the valley the waters of the Dolores poured silently from the still wild, still mysterious plateaus and mountains to mingle with the Colorado in a shining silver Y.

In that last light the junction of the two rivers became as lonely and remote from the present-day world as I had first imagined it would be. Alien to man, yet neither friendly nor unfriendly. Disturbing yet peaceful. At the very edge of space and outside the fetters of time.

I said something about it to Bill as we drove back toward the paving. About the untamed, unknown country that here lay close to the towns and just beyond the roads. He took me up enthusiastically.

"Unknown is right! We've got a lost mine within a dozen miles of Grand Junction, the biggest city in this part of the country."

It's the Lost Pin Gold mine, and the

story seems to have started about 1924 with an old prospector who brought placer gold in little pin-shaped pieces into Grand Junction and sold it to a jeweler. When he died, efforts were made to find the source of his gold. They knew he had ridden out with a man cutting posts in the cedar breaks. This man took him up the south side of the Gunnison River past the Black Rock dam. Beyond that point they could not trace him.

Then in 1945 two men left Grand Junction, crossed the Gunnison river bridge and turned left up the river. They entered one of the many canyons there and hiked until sundown when they made camp. While looking for wood one of them noticed little metallic bits on a flat surface of rocks. They were tenderfeet, but it looked like gold so they picked up what they could find before dark.

The next day they returned to Grand Junction where a prospector named Smith identified their find as gold. The two men went on to California, but one of them returned in 1947 to relocate the gold. He was unsuccessful.

On his first hunt for the pin gold, Bill Henneberger found nothing. He tried again Labor Day 1949. With Charlie White he went up the big canyon east of one called No Thoroughfare. There are four main branches in this canyon and about a mile up one of them Bill and Charlie

found water trickling between deep holes worn in the solid rock.

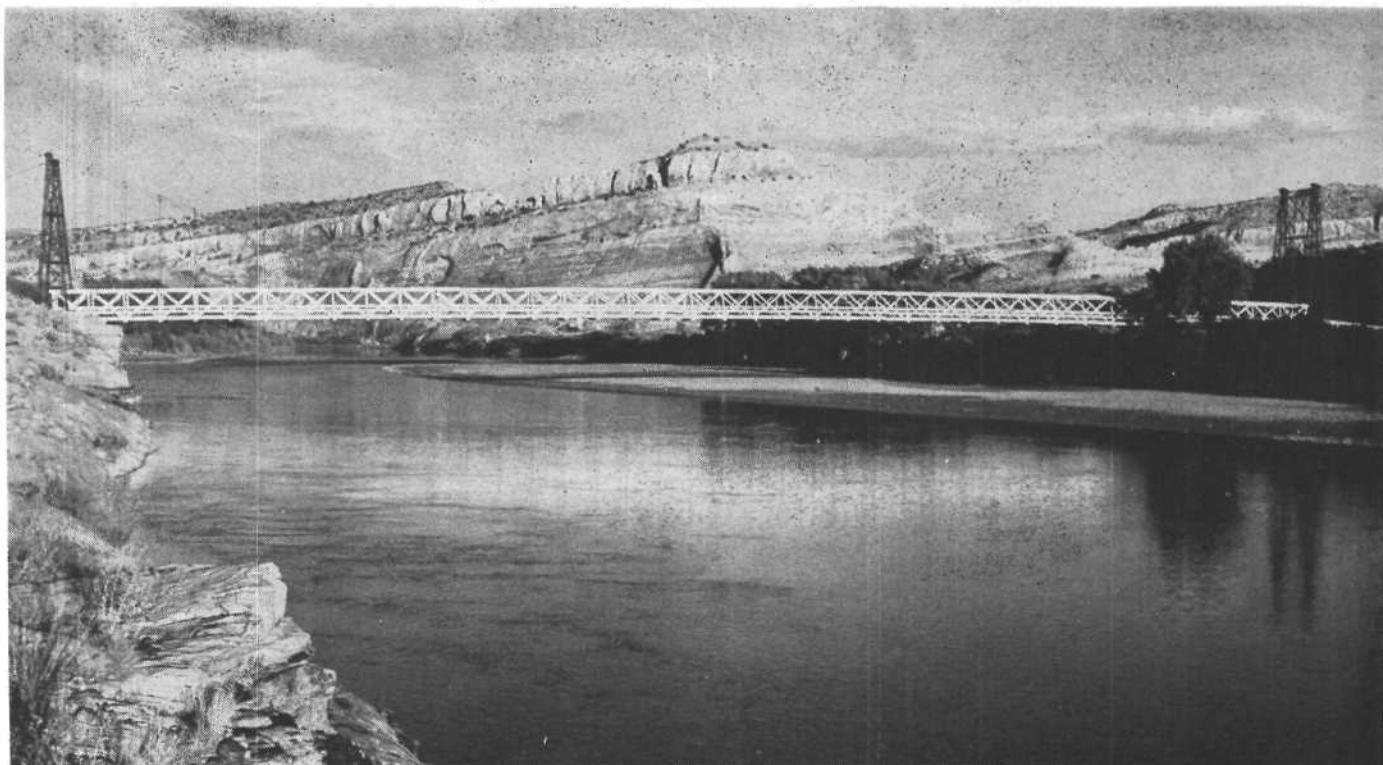
"I'd forgotten to bring a canteen," Bill explained, "and we had to have water or turn back. I told Charlie, 'Let's try this. If it was bad water, those frogs and tadpoles wouldn't be in it.' So we drank it and it sure tasted good."

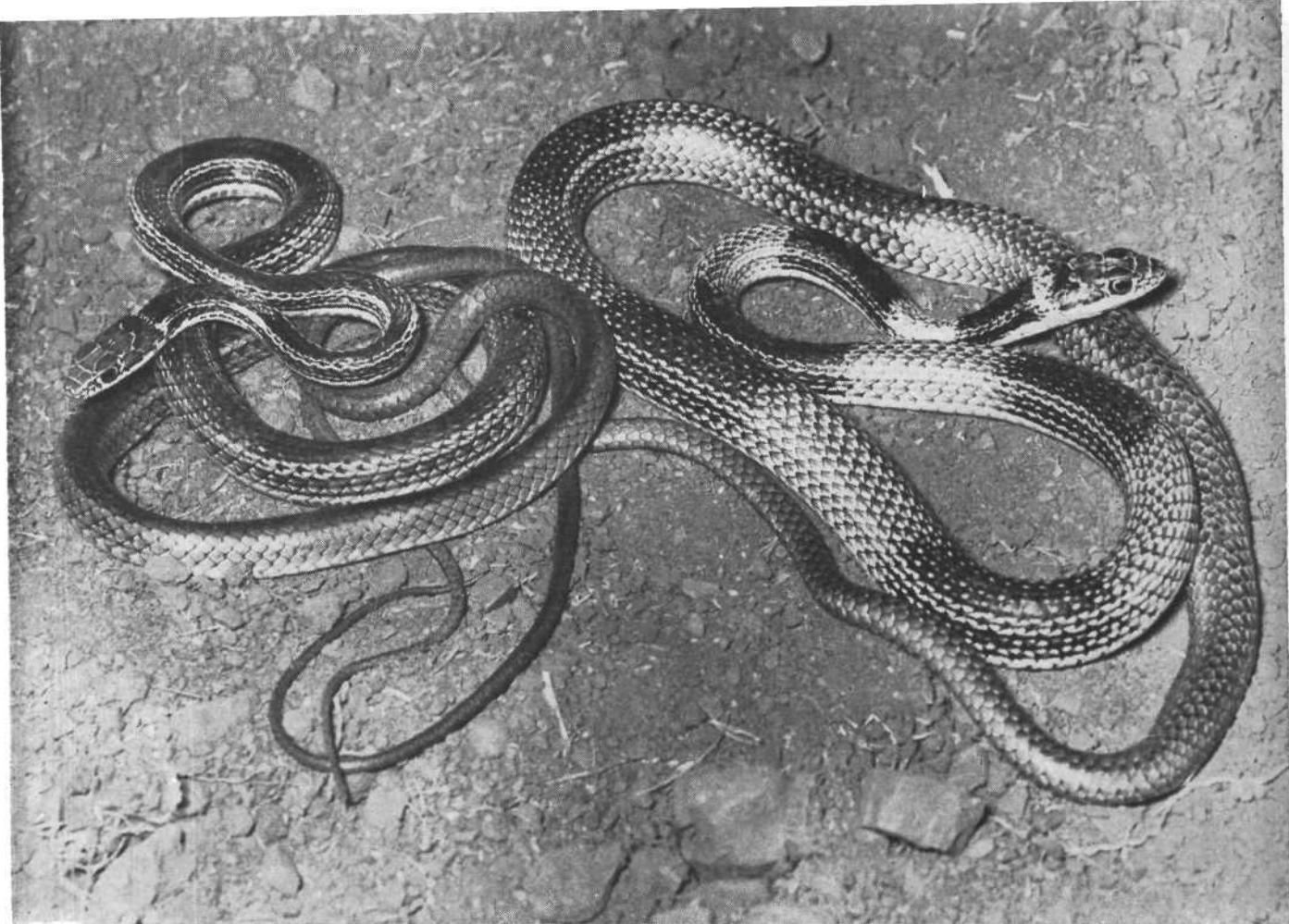
They continued and about two miles up the branch found an old campsite on the edge of the wash. "Grass and shrubs had grown up in the wood ashes where the fire had been. And I found a cache with a shovel, axe, skillets, pans and tin cans. The bottoms were rusted out of pans and skillets and the axe and shovel handles were rotted. I took samples in likely places in the canyon, but never panned a color. But I put a new handle in the axe, and I'm using it today."

"That's all I've gotten out of the Lost Pin Gold mine so far. But I'm certain that was the old prospector's camp. I'm going back again, and next time I think I'll find it."

We hope Bill does find his Lost Pin Gold. But we doubt if he'll be really disappointed if he doesn't, because we think Bill is one of those people who like to be out in the desert wilderness, whatever the excuse. Who agree with that ancient chronicler of the Coronado expedition who said, in effect, that even if they hadn't found gold, they'd found a wonderful place to look for it.

Dewey suspension bridge—one of only two bridges which cross more than 400 miles of the Colorado River and tie the colorful and fairly populous "Utah Strip," the southeast corner of the state, to the rest of Utah. Present placer mining operations are being carried on just beyond the bridge and to the right.





MEXICAN STRIPED RACER: (Masticophis taeniatus ornatus): The snake on the right measured 54 inches. Its tail made up 19 inches of the total. This is one of the Southwest's most striking snakes. It ranges southward into northern Mexico where it has been found in association with the creosote bush desert.

Streamlined for Speed . . .

By GEORGE M. BRADT

Photograph by the Author

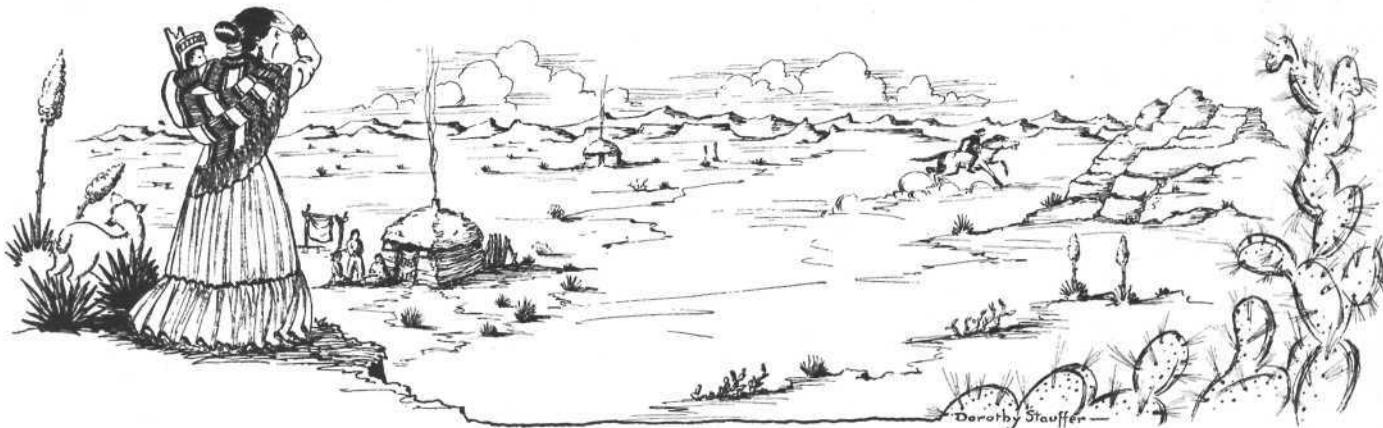
HOLD one of these long, slender snakes by the neck and you will get the surprise of your life. It will not hang limp as do some snakes, or try to curl about your hand or arm as do others, but will immediately begin lashing about with its whip-like body. Five and a half feet of scaly body makes an effective lash, and after two or three blows you are ready to let it go. This may well have been the start of the popular belief that some snakes chase people in order to inflict a beating upon them.

This species is one of the Southwest's speediest snakes. I have chased them among the rocks and underbrush in which they live and have only succeeded in catching them after they have tried to hide under a rock or in a shallow hole. But in spite of this, snakes are really not the swift creatures they are popularly supposed to be. None can even begin to approach the speed necessary to out-distance a man, as has so often been claimed. Tests with various species have shown that our fastest snakes, the racers, probably do not exceed a maximum of four miles an hour, even for a short distance. A rattler may go two miles an hour, a bull snake one and a half, and a king snake less than one mile an hour. They can certainly outdodge a man, however.

To get from one place to another when searching for

food, a mate, or a place to hide or hibernate, snakes have developed three main types of locomotion. The method used by the majority of snakes, both land and water species, is the wriggling or "horizontal undulatory" type in which the snake uses lateral body curves pushed against irregularities in the ground to force itself forward. The snake's trail in sand or water when employing this method appears as a series of horizontal s-curves. The second or "caterpillar" type is used principally by the heavy-bodied rattler, and consists of crawling in a straight line by alternately anchoring a few belly scales on rough places in the ground and pulling itself forward. A third is the amazing and complicated "sidewinding" of the horned rattlesnakes. It is a specialized method of progressing over loose sand whereby the body is thrown into a series of loops as the snake moves obliquely to the direction in which it is pointing.

A snake's color pattern is closely related to its physical activity. Active species such as racers and garter snakes are usually a single color or striped; sluggish forms like the rattlers are often blotched; and those of average activity are ringed or blotched like the bull and king snakes. The extreme flexibility of body which enables a snake to crawl and climb, swim, burrow, coil and strike is made possible by a great number of vertebrae, and by the long muscles, several pairs to a vertebra, which flex them. So great is this amazing pliancy that a snake can be tied into a knot without injuring the backbone, muscles, ribs or skin.



"Shading her eyes, she watched him gallop over the mesa until he was swallowed up in the purple and lavender layers of distance. Amado was gone!"

Without Pawn . . .

The Hopi mesas in northern Arizona constitute a little island entirely surrounded by the tribal lands of the Navajo. Both peoples derive their livelihoods from the arid desert — but beyond this fact they have little in common. In religion and in tribal custom they are as far apart as the Eskimo and the Hottentot — and it is not surprising, then, that beneath the surface there should be misunderstanding and racial prejudice. Here is a story in which a Navajo girl found a way to bridge that chasm of racial enmity. Desert Magazine does not often publish fiction, but we accepted this manuscript because we feel that the drama of this story is more revealing than any mere factual article could be.

By MARGARET MOWER
Sketch by Dorothy Stauffer

THE DUST from the rodeo field rose in a yellow cloud into the September sky of a late Sunday afternoon. Nellie Barbee sat on the ground near the calf chute, anxiously searching the crowd for Amado, whilst her baby, bound to a board lying across her knees, slept. The child's father was a good rider and always wanted to show that a Hopi could rope faster than a Navajo. She had counted on his joining the contests. Although the games were being held in Navajo territory, many Hopis had come to show their prowess. But now the affair was almost over and she had not seen him.

Nellie sat relaxed in body, but the turning of her head and the sensitive movement of the corners of her mouth betrayed her strain. The skin was finely stretched over her high Navajo cheek-bones. Her hair, bound firmly with strands of cream-colored wool, protruded in a large knot at the back

of her head. Hers was a stark, strong beauty, set off by her dark blue velvet blouse, by her silver necklace and her turquoise beads hanging to her waist. Through her ears were strung small turquoise, and on each wrist was an enormous plaque-bracelet, making her bronze hands appear small and delicate. She sat quiet and alone, without speaking to anyone. Her pride forbade her asking about Amado. Her trouble was one she did not want to share, even with the members of her own family.

A stir in the crowd interrupted her brooding and drew her attention to a car bumping over the rutted road leading from the Trading Post to the field. She recognized it as belonging to Raymond Ganner, the trader. Nellie had known him since childhood. Many times she had seen him with her father. The two men had been old friends. The White man owned several Trading Posts in the territory, and she had always been in

awe of him. Now she stood up, interested in his every move.

Ganner, or Ramon, as everyone called him, strode over to the rough platform, set up for the occasion, and spoke with the announcer in fluent Navajo. The Indians gathered around him as he offered cash prizes for the remaining foot races, to be run first by the two oldest men, then the women, and finally, the children. As a finale, he talked of a tug of war between ten Navajos and ten Hopis of his choosing. A murmur of approval arose from the alert but usually silent onlookers.

Nellie watched the races with stoic patience, waiting for the tug of war, her last hope of finding Amado. The rope was finally stretched in the center of the field, rather far from where she stood, but she could see Ramon picking out the volunteers and ranging them on either side. It seemed that the Hopis had more weight, but she knew her people would not allow a defeat on their own territory. Suddenly, last to be chosen on the end of the Hopi rope, she saw Amado! She edged her way along the sidelines towards the center of the field where she could observe more carefully.

Ramon raised his sombrero, counted three, then whipped it down with a swift gesture. The rope seesawed back and forth for a few minutes. The Navajos pulled with a fierce relentless rhythm, their backs arched, the muscles of their legs and arms taut, their bronze faces set. Then slowly the Hopis gave way, their bulk sprawled over the line, many on their knees in the dust. The tension eased, and the crowd broke up with grunts of satisfaction from the Navajos.

Nellie tried to climb under the wire that held back the onlookers from the field, but children and more agile persons swarmed around her, hemming her in. Desperately she kept her eyes on Amado, but she could not reach

him. She saw him run over to the other side of the field, swing into the saddle, giving his roan pony an angry kick with his heels and forcing an opening through the crowd, looking neither to right nor left. Shading her eyes, she watched him gallop over the mesa until finally he was swallowed up in the purple and lavender layers of distance, and the cool of the evening roused her from her vigil. Amado was gone.

As she fastened her baby to her back by the shoulder straps and walked toward the Trading Post, her mind was not at all on picking her way barefoot over the rough road. She did not even notice the little whiffs of dust kicked up by the ruffles of her long skirt. She was thinking of the events she had just seen and of what she should do now. She was glad her mother had not come to the rodeo to gloat over Amado's leaving her again. Amado had come back for the games, but had not wanted to find her, nor see his three-weeks-old son! Angry over the Hopi defeat, he had ridden away again, off towards the Black Butte country. He would not come back for a long time unless she found some new way to reach him. No doubt, in his present mood, he felt he must avoid her brother Bob and another fight. She had come between them the last time, but once a Hopi and a Navajo became enemies, they would surely fight to the death if they met again. She tossed back her head like a pony shying at some dread object. Stupid men! Why must they hate each other because of her? What could she do?

Darkness was creeping over the mesa and she hurried on to the Trading Post, now less than a quarter of a mile away. A square, rough-hewn, stockade-like building, it stood like a lonely fortress in the vast land of the herders. No sign, no pole, no man-made fence scarred the mesas rolling towards the cedar and pinon-covered mountains on the horizon. Those hogans which were within range melted into the background. They were part of the silence and the peace that lay under the endless heavens. The aromatic scent of the sage-brush rose to Nellie's nostrils from the fast cooling ground. She breathed deeply of it before entering the Post.

Inside the building, strange shadows moved over the walls, cast by two swinging oil lamps. Navajo men in straight-brimmed black hats stood in groups, shuffling their feet, waiting for their first refreshment after the hot dusty afternoon; for pop, or *toddle-toche*. The continuous tinkle of the falling bottlecaps cut through the drone of muffled voices. The air was

heavy with acrid smell of sweat and leather.

Nellie passed along unnoticed, weaving around the men, watching carefully. As she had expected, her brother Bob was in the center of a group of five or six. She heard him brag over the Navajo victory in the tug of war, and she heard the low derisive laughter of the others when they spoke of Amado. A knot formed in the pit of her stomach. She slid the straps off her shoulders and held her child closely to her. As she stood brooding in front of the counter, she became aware of the watery stare of a pair of pale eyes. Their owner, Perry Hallett, was manager of the Post. His sandy hair, white eye-lashes and bony nose gave him the look of a bald-headed eagle as he leaned towards her as though contemplating some prey.

"Buying again, Nellie Barbee?" he asked in a nasal tone, as she began picking out some safety pins, tooth picks, flashlight batteries and other items from the counter in front of her. She said nothing, merely pointed to evaporated milk, babies' food, and canned vegetables on the shelves, which she carefully piled together as he got them down. While he was adding up the sales slip, she remembered she had no money with her; her brother carried the family purse. Reluctantly she turned to ask him for what she needed, but stopped short, hearing more of his ugly words. She could not bring herself to ask him; she could not move. Her jaw set and her nostrils flared. Trapped, she again faced the counter. She stood quite still until, suddenly, she was seized with a new idea. It came to her strangely, from the outside, from the Great Spirit! She would have her own credit!

"Please to charge these to my account." She said it to Hallett, slowly stressing the words.

"You mean your family's, don't you?" said Hallett.

"No, not any more, please make it separate, I have my own sheep, I can pay." She gave him a searching look from under her black brows, a look of mingled appeal and command. Why had she not thought before to be free of her mother and her brother?

"But you have no account of your own. I can't give you credit without pawn, you know that." He looked down at her bracelets with a calculating eye.

"My father and whole family always have big credit with Ramon." Nellie felt stirred with pride.

"Not without some kind of holdings. Besides, you're not like the rest of your family, Nellie. Not so regular."

He eyed her maliciously. "You've got a baby, and everybody knows you're not married. I might get into trouble. It's cash or pawn, or you'll have to wait."

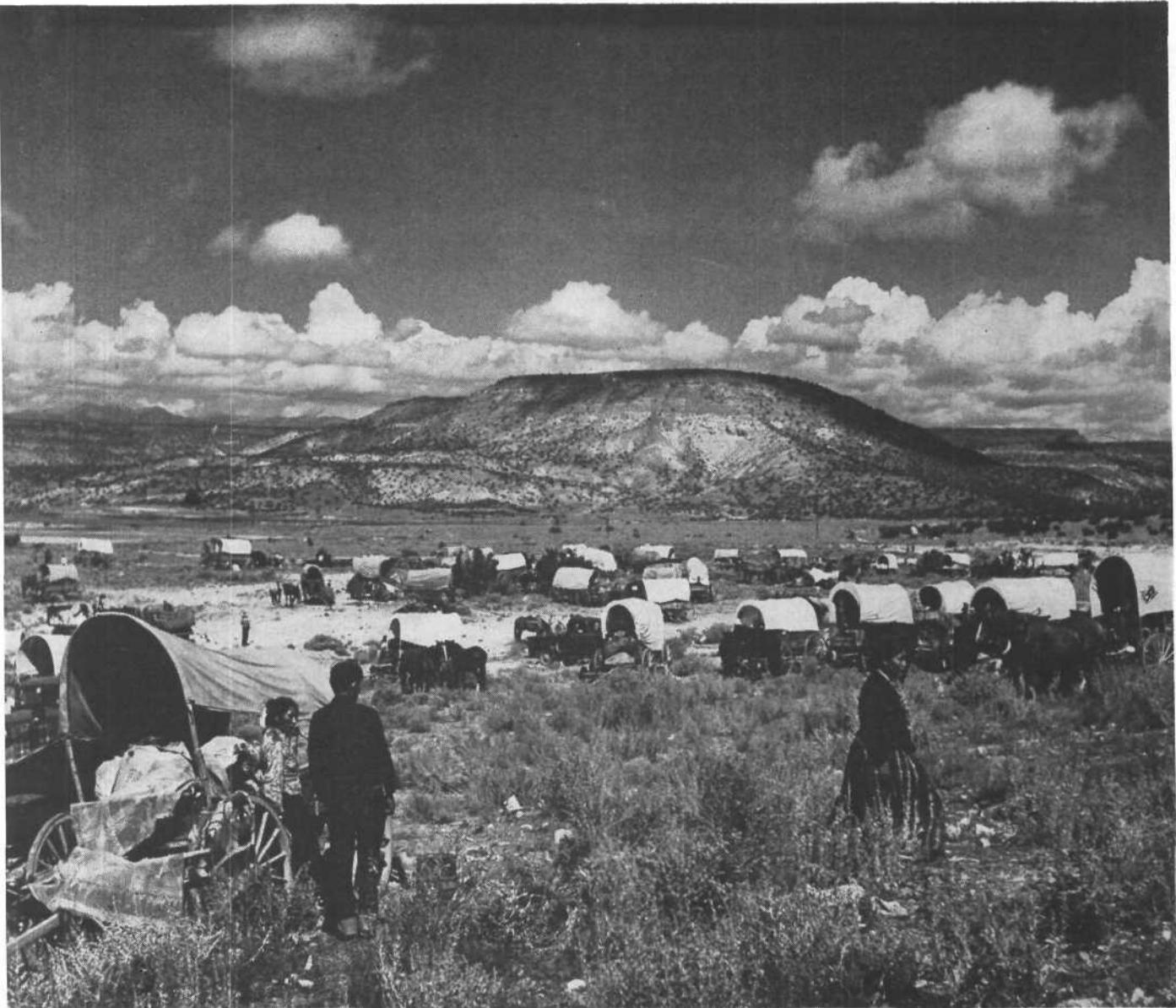
"You ask Ramon!" Nellie's arms wound more tightly around the bundle she held. She felt herself growing strong, ready to fight for this new idea of freedom.

"You ask him." Hallett retorted. He pushed her purchases to the back of the counter and turned on his heel.

Nellie's lip curled in disdain, but she was quivering. Making for the door through the forest of dark figures, she stepped out into the night. The dome of dark blue, rich with stars, curved down to meet the plateau. She looked up as if to read some answer to her dilemma in the Milky Way. It was true that she had no legal husband, but that was not of her choosing. Her brother had brought this shame upon her. She and Amado would have been married by a priest by now, if Bob had not fought with Amado because he thought no Hopi fit to be his sister's husband. Her mother, too, had sided with her brother. They had said black, old-fashioned words. Deep hatred was in their hearts for any Hopi. Amado had wanted to marry her until he had been insulted. He had bowed before this parental wrath, not out of fear for himself, but out of fear for her. But he would come back sometime! The wind and the stars and the dawn knew she was married to Amado, even if there had been no wedding in a church. Did Perry Hallett think she was a bad woman? Should a white man be as unjust as her brother? Not Ramon! Ramon had known her father as a friend. She must find him; she would dare to talk to him.

Burning now with the desire to show Hallett that a Barbee was not to be put aside so lightly, she found her way in the dark to her wagon and to her two younger sisters, who had already unharnessed the horses and hobbled them for the night. Briefly she told them that she must see Ramon. Leaving the baby in their care, she wrapped a blanket securely around her, masking her head and shoulders. So, she set out alone to find him.

Ramon's office opened onto a crude, uncovered platform, crowded with Navajo herders and cattle men waiting to bargain with the Patron. It was September, marketing time and Nellie was the only woman there. Through the office window she could see Ramon on one side of a kitchen table, an oil lamp between him and his succession of visitors. She watched many come and go.



When the Navajo gather for one of their ceremonials or rodeos.
Photograph by Rolf Tiegens, Albuquerque.

She saw one take out of his saddlebag three long belts, decorated with silver conches and a silver bridle-bit and lay them on the table for Ramon to examine. Pawn! Nellie knew how dear to the heart of a Navajo were his belts, his buckles, his turquoise beads. She saw the man walk out leaving his possessions on the table, and a pang seized her. Would Ramon ask her for her bracelets? She fingered them in the dark and stroked each stone. They were worth much in money, but to her they were more—the mystic symbol of her future. Amado had made them for her. Her thoughts were interrupted by the sight of her brother entering the office. He stood before Ramon, a very different man, she thought, from the one who had turned on her that night five months ago, and savagely cursed her for knocking from

his hand the knife that he had drawn against Amado. At last he came out. She sat silent and unnoticed as he passed her and disappeared.

She did not see Ramon that night nor the next.

It was on the morning of the second day that he finally called her in. A cup of coffee in his hand. He shouted to the housekeeper to bring another for "handsome Nellie Barbee." But she did not take the coffee nor the chair offered her. Some memory prompted her to sit on the floor at his feet as she had done as a child. Her upturned face was gaunt from two almost sleepless nights, and her eyes stood out dark with questions.

"You have something on your mind, I can see. Go ahead, Nellie." Ramon tipped back in his office chair.

"I want to buy . . ." she began.

"From your face I thought you had stabbed someone at least," he interrupted. Smiling, he patted her on the head, and she wondered what he had heard about her. She felt she must act quickly now. Stripping the bracelets from her wrists, she forced them into his hand, taking him off his guard.

"I am no more child, I want my own credit! Here is pawn!" she said passionately. He studied her, surprised at her sudden flash of emotion. "That's not the whole story. Come, let's have it."

It took only those few words to touch the main-spring of her deeply injured feelings. Breaking into Navajo, she told him of Amado's courtship, how they planned to marry, of how they had been left alone in the hogan one night while the rest were hunting some lost animals in an arroyo. She

Desert Quiz

This monthly Quiz is one of the most popular features in the Desert Magazine. The desert folks like it because it is a real test of their knowledge of the land in which they reside. The tenderfoot readers like it because it provides an interesting lesson each month in the history, geography, Indian life, botany, mineralogy and lore of the desert region. A score of 12 to 14 correct answers is good, 15 to 17 is excellent, 18 or over is exceptional. The answers are on page 45.

- 1—If you applied to Uncle Sam for a "Jackrabbit Homestead" your lease would be for—Five acres..... 10 acres..... 40 acres..... 160 acres.....
- 2—Going from Tucson, Arizona, to Guaymas, Mexico, you would cross the international border at—Douglas..... Nogales..... El Paso..... Mexicali.....
- 3—The name Peralta is associated with the legends of—The Lost Gun-sight mine..... Lost Breyfogle..... Lost Arch..... Lost Dutchman.....
- 4—Prehistoric Americans ground their meal in a—Metate..... Atlatl..... Mescal pit..... Kisa.....
- 5—The blossom of the Nolina is—Yellow..... Crimson..... Blue..... Creamy white.....
- 6—The Mountain men who trapped the Western territory during the middle of the last century derived their income mainly from the furs of—Fox..... Beaver..... Mink..... Coon.....
- 7—For climbing precipitous rocks in dry weather the safest footgear to wear is—Leather-soled moccasins..... Hobnailed boots..... Leather sandals..... Rubber-soled shoes.....
- 8—The pass through the mountains of Southern California between San Gorgonio and San Jacinto peaks is properly called—Cahuilla pass..... Banning pass..... Whitewater pass..... San Gorgonio pass.....
- 9—The color of azurite is—Green..... White..... Lavender..... Blue.....
- 10—Ganado is a Presbyterian mission on the reservation of the—Navajo Indians..... Apaches..... Yumas..... Paiutes.....
- 11—"Butch" Cassidy whose name occupied a conspicuous place in the annals of the West between 1822 and 1846 was a—Famous sheriff..... Notorious outlaw..... Fur trapper..... Army scout.....
- 12—The Southwestern state having the smallest population per square mile is—Nevada..... Arizona..... Utah..... New Mexico.....
- 13—One of the following Arizona towns is not near the banks of the Little Colorado river—Cameron..... Holbrook..... Ashfork..... Winslow.....
- 14—Arizona's annual Buffalo hunt is held in—White Mountain Apache reservation..... Chiricahua National Monument..... Houserock Valley..... Petrified Forest.....
- 15—One of the main sources of food for early Indians living on the Southern California desert was beans from the—Mesquite tree..... Ironwood tree..... Smoke tree..... Joshua tree.....
- 16—The approximate age of prehistoric pueblo ruins in the Southwest is most accurately determined by—Indian legends..... Tree rings in roof timbers..... Pottery shards..... Petroglyphs on the rocks.....
- 17—Chief industry of Trona, California is—Milling of gold..... Recovery of chemicals..... Mining of lead..... Processing of magnesium.....
- 18—Most of the flagstone used in the Southwest is produced from quarries at—Ruth, Nevada..... Ashfork, Arizona..... Daggett, California..... Cedar City, Utah.....
- 19—River flowing near the town of Carlsbad, New Mexico is—The Rio Grande..... San Pedro..... Pecos..... Escalante.....
- 20—Leader of the first expedition to navigate the Colorado river through Grand Canyon was—Fremont..... Powell..... Kit Carson..... John Wetherill.....

described the fight between Amado and her brother, and the bitter opposition of her mother. Her plea, in the long vowels and gutteral consonants of her language, flowed out moving and direct.

Ramon was thoughtful, stopping her gently. "What does your mother say?"

"She say Hopi is not good enough. She say make Amado send hundred dollars and conch belt and forget."

Ramon replied slowly. "Marriage without your mother's consent is dangerous. I don't advise it. You have your son, Nellie, gossip soon dies and we'll see about the money. Perhaps it is best."

Nellie lowered her eyes, rocking back and forth, communicating her anguish to him through the thick silence. The tassels of her necklace swung rhythmically.

"So it's Amado you really want?"

It was too hard an admission for her to make in words. Her head sank on her breast, she swayed continuously, her arms around her knees, and again she moved him deeply. Several seconds went by before he rose. Touching her head, he walked slowly down the length of the room before he called through the door leading to the store.

"Hallett, I want to speak to you." The store manager came into the office.

"Hallett, you know Nellie Barbee. Her father was one of the biggest sheep herders on the reservation. We have always had good dealings with the Barbees. I know that Nellie here is like her father, can be trusted to the penny. Establish a separate account for her, and I am not going to take pawn—whatever she wants she can have on credit, is that clear?"

Hallett nodded and retreated.

"Without Pawn!" The words sang like dawn-birds in her ears. Nellie knew that Ramon was breaking every rule for her. She knew the news would race along the reservation grape-vine. So quick to know the daily price of calves, communicated without wires to the farthest outpost, Navaio and Hopi would know that Ramon had opened her own credit, that she, Nellie Barbee, was free from her family . . . free to marry. Amado would hear. Amado would know that she had fought for this freedom for him. He would come!

Her eyes said all that she found so impossible to voice as she held out her hand self-consciously in the American fashion. Ramon slid her bracelets around her narrow wrists. "Good bye," he said, "and good luck, Nellie."



Catherine Venn's cabana beside the little rock hill for which the homestead was named. The dark ridge in the left background is Haystack Mountain, a spur of the Santa Rosa range. The cove in which the homestead is located is at the mouth of Cat Canyon, one of the many lovely palm canyons in the Southern California desert. Photograph by George Merrill Roy.

Diary of a Jackrabbit Homesteader . . .

This is the diary of a city woman who did what many city dwellers dream about doing, but never quite reach the point of breaking away. She left her job in the Los Angeles city hall to spend several months in a little cabana on a jackrabbit homestead not many miles from Palm Springs. This day-by-day record of what happens to a tenderfoot on the desert will be continued serially in *Desert Magazine* for six months.

By CATHERINE VENN

TWAS a rainy morning in January, 1943, when I read a small item in a Los Angeles newspaper stating that Uncle Sam was opening certain public lands on the desert for 5-acre homestead leases—jackrabbit homesteads they were called.

I lost no time in splashing across the street from my office in the city hall to the top floor of the postoffice building where the U. S. Land Office was located. A half hour later I had deposited a five-dollar bill as my entry fee on a certain 330x660 feet of terrain out somewhere on the Southern California desert.

I was told that prospective homesteaders were expected personally to inspect the sites before filing their applications. But this rule was not rigidly enforced as long as the applicant was willing to take the gamble. I was told, however, I probably would get rough desert land without water or roads. However, one cannot expect too much for five dollars.

I began hoarding my gasoline coupons. I was anxious to find out if my grab bag homestead was accessible. Five acres of desert terrain could well be a shifting sand dune, a heap of boulders, the middle of a wash or the rocky slope of a mountain.

The more I thought of the world of real values these desert acres could open for me, the more anxious I be-

came to locate them, because I was fast reaching the saturation point of city living. So much so, that there were mornings when the urge to drive out to the desert was so strong I could hardly resist it. Instead, I would find myself at my desk listening to jangling phones, pacifying citizens and taxpayers, jumping to the buzzer from the Boss' desk, and deciphering my Gregg as I treaded another day in my squirrel cage.

And then the morning came when a group of us tenderfoot jackrabbit homesteaders set out in a spirit of high adventure to locate our sites. There was much chatter on the way about the sort of cabins we would build, although all Uncle Sam required was a dwelling at a minimum cost of \$300.

As we turned up the highway that led to our section, the picture that met our eyes left us breathless. The majestic mountain range rising before us was covered with a mantilla of snow that had fallen into folds and patterns as exquisite as old lace. There was nothing man-made to be seen on the brush-strewn landscape. On either side low walled mountain slopes of smooth rock sheltered the sandy-floored cove. Finding ourselves in such a rare setting magnified our hopes and intensified our suspense.

We stopped just short of where the nearest paved road commenced its serpentine up the mountain. At this point

we fanned out in search of the government survey monument that established the section corner. We soon stumbled upon it and excitedly started pacing off the tracts to our sites.

Words failed me when I discovered my good fortune. My five acres proved to be fairly level except for a slice of wash, part of a knoll, and nearly all of a little rock hill—from which distinctive feature my homestead derives its name. It is a proud miniature of a hill with a character all its own. We fell in love at first sight, Rock Hill and I.

During the war Rock Hill was just a haven to dream about and visit for an occasional picnic. However, two beneficial improvements were undertaken in the section. A majority of us leaseholders had joined in a tract survey, and one of our number farther up in the section had a road bulldozed to his tract. This road bisected my property and made Rock Hill accessible from the highway.

Then one Saturday soon after hostilities had ceased I saw a little cabana parked on a Los Angeles business lot. The thought came to me that something like this might be the temporary housing solution for Rock Hill without crippling my budget too badly. The little midget of a house was 8 x 15 feet and boasted four windows. I contacted the factory and found they had but two on hand. I told them to put my name on one of them, and they gave me three weeks time in which to arrange for hauling it off.

During this interim I was as busy as a nesting swallow rounding up the necessary paraphernalia for a dry camp pioneer. I finally located such antiques as kerosene lamps and sad irons, and secured five gallon water cans, a portable oven, a two-burner butane plate, and a chemical Chick Sale out of a trailer.

Of course most everyone thought I had gone crazy to turn my back on comfort and security and set out on the rugged, uncertain life of a desert homesteader. But a redhead, even a fragile one, will bite on tough challenges, and this was tough because I was entering upon a strange new world alone with my very livelihood at stake. There were those who feared for my personal safety, and worried that I would be lonesome. To me, these were secondary challenges to the venture itself.

I didn't have the heart to ask any of the menfolk I knew to be my housemover, and believe me, none volunteered. And I could have shipped the cabana parcel post for what one outfit wanted to charge for moving it to the desert. I decided to be my own housemover and haul the cabana as far as my parents' citrus ranch halfway distant to my homestead.

I arrived bright and early at the rental yard to pick up the trailer chassis for the cabana. The attendant asked if I had ever pulled a trailer and when I replied in the negative he remarked, "Well, morning traffic is as good as any to learn." And when I made a jerky departure, he called, "When you come to the stops, don't forget you've got a flat car on behind you." Forget! thought I.

The first thing I spied in the factory yard was my mansion dangling in the air like something hung up to cure. When it was made fast to the chassis, a factory hand drove the monstrosity to the gate for me, and when he said, "You're on your own, now," something hit me in the solar plexus. But I mustered the courage to take over the wheel and it felt as if a box car had been coupled on behind. Of course the rear view was completely blocked. This circumstance hadn't occurred to me until I was leaving my apartment, so woman-like I snatched up my hand mirror to thrust out my car window in case of emergency.

Crawling out of the city at a snail's pace focused attention on a sole woman driver of such a cumbersome and unusual object. People gasped as if the cabana and I were something off a circus lot—and we didn't need a caliope playing to call attention to us. It was when we

made our entry on Orange Grove avenue in fashionable Pasadena that we really made the bluebloods sit up and take notice. And what a snubbing they gave us; even their traffic officers looked the other way. Apparently my float was desecrating the Rose Parade route. I tried to drive on the curb side of the street but the cabana took to playing tag with the buses and I was afraid we were going to be It.

In desperation I was obliged to swallow my pride and hold out the hand mirror in order to cut into the center lane. A pedestrian in the crosswalk gleefully ballyhooed, "Look! Look!" pointing at my extended arm. Then some Baby Snooks wailed, "Daddy, I wanna little house like that." To shield my pride, I stuck my nose up a lift and assumed an air of defiant nonchalance.

My car was boiling like a teakettle when I reached the highest grade on the route. But it managed to spout and steam into the port of a service station and throw the owner into a fit of nervous prostration as I nearly collided with the overhang on his building.

When I turned up the driveway of my parents' ranch, my father hastened out and waved me in as if I were entering for the first time. Mother stood on the front porch and the expression on her face was as horrified as if I had been dragging in a body.

A husky long-suffering brother came to my rescue, and soon had the cabana resting on cement blocks. This was no small feat, but I think he was too embarrassed to have to explain my madness to the neighbors.

During the days that followed the time spent in fixing up my little desert home gave me more genuine diversion and satisfaction than anything I had ever done. When I set up my simple furnishings against the freshness of paint and gay wallpaper, arranged the bright coverlet on the couch, and hung the little curtains, I couldn't resist placing the singing teakettle on the cold stove plate and previewing my domicile under the soft light of the kerosene lamps. It gave the room a cozy, friendly atmosphere. Hollywood could have its Kleig lights, I thought.

For the housemoving operation my brother was able to enlist the assistance of a neighbor with an orange truck. To elevate the heavily loaded cabana to its high berth for the journey required tedious and back-breaking maneuvering, as all we had were bricks and eucalyptus logs for underpinnings.

When I led the truck up the highway to Rock Hill the majestic mountain had donned her snow lace mantilla again. The desert sky was overcast and we had to set up the little house before late shadows vanished into darkness. Taking off the cabana called for sensitive manipulation of the unevenly sawed logs, as the loose, sandy gravel kept shifting under the weight. After much time consumed in carefully inching the truck out from under the unsteadily balanced house, it wavered on its shaky feet, then crashed!

Miraculously it fell upright, but the noise was as if every board in the floor had broken. If it had toppled on its face I might have turned fatalist and abandoned ship. Luck was with us, however, and all was well. The two men worked until dark leveling the foundation, and then tried to prevail upon me to return, tactfully implying that such a "Godforsaken place" might better serve for an occasional retreat.

"Godforsaken," I half whispered, as it had always seemed that God was never so close as at Rock Hill. Stubbornly I insisted that I had come down to stay. I watched the path of their headlights winding out to the highway.

The little kerosene lamps were the only heat I had against the penetrating cold.

Deep in a hidden canyon in northern Arizona, men have found the deserted camp of a mine where a fortune in high-grade gold ore is believed to await the re-discoverer.



Lost Mine of Coconino . . .

By GLADWELL RICHARDSON

Illustration by John Hansen

THE NEW sun was still golden when Cliff Haines rode his jaded horse around the bend into a wide canyon, coming instantly to an amazed halt. Revealed through the clarity of rain-washed air, a small village sprang into being in the Arizona wilderness.

For a few moments he couldn't believe his eyes. There was a road and a group of log and stone buildings. Two-wheeled wooden carts, sun-dried and warped beyond all further use, stood on the roadside of the village. Tunnels showed in the west wall of the canyon. Ore dumps spilled out beneath their yawning mouths, and below the village was an arrastre.

The village was so real Haines found himself listening for the sound

Many stories have been told about a fabulous gold mine located somewhere in the canyon wilderness of northern Arizona—and there are prospectors living today who are convinced the stories are true—yet the exact location of this high-grade deposit remains an unsolved mystery.

of voices, expecting to see people moving about. Then the surprise was over and he glanced apprehensively over his shoulder at the upper end of the canyon where it ended in a crooked defile. He had been on the run four days, keeping ahead of pursuing Hualpai Indians who had killed his three companions while prospecting southeast of what is now Kingman, Arizona.

Perhaps he could find concealment in this place. He stopped and looked around to appraise the possibilities. The song of a canyon wren echoed from the cliffs. There were no fresh tracks on the ground. He saw that shrubs and small trees had grown up in the paths before the doors of the dwellings.

Then the truth dawned on him. This was a ghost village, a place deserted by its inhabitants long ago. He rode along the old road silently, in wonder. Through empty entrances, broken parts of walls, even on the outside of them he saw parts of chairs, tables, benches, rude stools, wrecked and mouldering. Floors, spaces around the walls, were littered with refuse, wind blown sand, and piles of debris carried there by pack rats.

Haines had progressed as far as the arrastre when he glimpsed the

painted face of a savage peering at him from the canyon rim. The race for life was on again. Haines spurred his jaded horse. He found a passable trail down the canyon and escaped again from his pursuers. Three weeks later he reached distant Tucson.

This is the first known instance where a *Norte Americano* found the old village in the canyon containing the Lost Mine of Coconino. (Sometimes it is also called the "Lost City of Coconino County"). The story told by Haines following this chance discovery in 1853 has been passed along from generation to generation to the prospecting men in the Southwest.

So much faith is placed in the existence of this lost mine and its rich ore that prospectors and those who seek lost mines have been loath to discuss it with persons outside their own fraternity. As far as I have been able to determine no story on the Lost Mine of Coconino has been published in any form.

Like all lost mine tales this one contains statements accepted as unimpeachable fact, yet without any attending proof. All prospectors who seek it believe that a party of Antonio de Espejo's men discovered the gold there originally in 1583. This was the year they found copper in the Verde Valley, reaching it through Oak Creek, which they named "Canyon of the Grapes."

Samples of the ore and location maps were taken by Espejo's men to Mexico. These made their way into the hands of the Church, and two decades after turn of the 17th century an exploring party came directly north to the Lost Mine of Coconino, making further surveys and doing considerable work.

After their return to Mexico difficulties of government, the Church, wars in Europe, and finally the pueblo rebellion in the Southwest, halted further work at the mines until the beginning of the 18th century. Now, so the saga goes, several priests accompanied by a squad of soldiers and a few Spanish families as overseers of the work, brought in 200 Opata Indians from Sonora. The village was built, several arrastres constructed and the Opata Indians got out the gold ore. It was supposedly worked from around 1720 to 1760, though only intermittently. Between periods of mining a few Opata Indian families remained in the camp as watchmen. They lived in brush hovels rather than in permanent buildings.

At this point the story shows a gap. There is no reason given for abandonment of the mine, nor is it known

what happened to the gold bars made there except the vague statement they were transported by burro via old Tucson to Mexico City.

As for actual records in archives and elsewhere, none, if ever discovered, have come to public attention.

Among veteran prospectors of northern Arizona there is no doubt this village and lost mine exist. This despite the fact that the remote area has been thoroughly mapped by the Forest Service. It lies somewhere in the extreme southwest corner of Coconino County, the area bounded roughly by Oak Creek Canyon in the east, Flagstaff-Williams-Ashfork on the north, Drake and U.S. Highway 89 on the west, and the Verde Valley and Perkinsville on the south.

This is a vast country of several thousand square miles, unbroken, wild, with choked canyons. A teeming forest of matchless beauty, and above all a weird and fantastic land with few roads and trails touching its borders.

Two singular features give this lost mine an intriguing allure. The first is that few of those who have seen it have long survived. The second is the prospectors' positive belief they can take out millions in gold from the main tunnel almost with their bare hands. They are as sure of it as they are of night and day. They have guarded their knowledge of the lost mine so well there is scarcely anyone outside of their clannish group who knows many of the details.

One protective device I have heard them use when questions are asked is the casual reply: "Oh, you must mean the Lost Padre mine. Yeh, it's somewhere in there."

The Lost Padre is almost as famous in the Southwest as the Lost Dutchman, but unlike the latter it has more basis of fact in old Spanish records. Yet no one has so far been able to find it either. It is supposed to be in the same general region.

Following his escape from the Hualpais, Haines in Tucson related finding the abandoned village. He sought information, but failed, so the story goes, until eventually he located an aged Mexican in Sonora, who told him a story handed down from his grandfather. This grandfather was an Opata Indian, whose ancestors actually had worked the mine.

Haines now disappears from the saga. But leading a party of prospectors from Santa Fe, New Mexico, in 1874, comes a hardy adventurer named John Thomas Squires. Squires was equipped with a map, supposedly drawn at Haines' direction. Tattered copies of this map are in the possession of lost mine hunters today.

Squires spent a summer hunting the lost village. He is said to have found it, and also located a nearby cave where were old rusted Spanish arms, two small cowhide trunks, some filled ore sacks of leather, and cooking utensils. In the trunks Squires discovered books printed in Spanish and bound in hide.

The Squires party explored the canyon completely, opened up the caved-in workings, retimbered tunnels, and repaired the biggest arrastre for use. Two of the largest buildings were cleaned out and occupied.

Squires remained long enough to melt one or two small bars of gold to finance mining supplies. With one companion he went to Santa Fe and employed more miners to return with him to the Arizona wilderness.

They now started getting out gold on a grand scale, melting it into bars which Squires later sold in Santa Fe. They did not know they were in forbidden territory, surrounded by enemies who resented their presence—the same enemies who perhaps had stopped the previous operation of this mine. There were renegade Mojaves to the west, Hualpais to the north, and the most dreaded of all tribesmen—the Apaches—to the south.

The Indians made their attack one cold morning at dawn. Half the mining party was killed before horses could be saddled and gold loaded on pack animals. The survivors fled down the canyon, some of them being pierced by arrows as they ran. Squires was away from camp at the time but from the rim he saw smoke over the campsite. He escaped, but is said to have been killed in a feud in Taos not long afterward. One of the old maps possessed by prospectors today is said to have been drawn by one of the men who worked for Squires.

After the Apache wars ended in the late 1880's, some of Squires' men tried to go back, entering by way of Prescott. Yet there is nothing to show that they found the mine again. For more than two decades the lost mine and its ruined village were shrouded in silence. Then in 1896 W. O. Howard, better known at Flagstaff as "Bearhunter" Howard, stumbled onto the lost mine by accident. He had been a meat hunter for construction gangs when the Santa Fe railroad came through. Afterward he continued at this business when he could. While seeking new game territory he came upon the defile. Curious, he rode down, and thence into the canyon.

Howard investigated the place, bringing out two of the hide-bound books from the cave near the camp. He believed he had found the Lost

Padre, and related his find to two trusted friends, both prospectors. They smiled at his belief, and Howard heard from them the story of the Lost Mine of Coconino.

The following year Howard started back alone. The open mouth of the canyon naturally seemed the best means of reaching it. That was what Howard thought. But he could not locate it!

One of his trusted friends was Alf Dickinson, who told me that Howard spent the next several years trying to find the lost mine; that it became such an obsession with him he could hardly discuss it without becoming angry. Finally Howard teamed up with Milt Farrell. Between them they spent much time quartering the area, on the theory that a systematic exploration of the region eventually would bring them to the canyon of the lost mine. But they had no success. Farrell had a family to raise, a ranch to work, and lost interest.

Howard continued the search periodically. Then one day he rushed to Dickinson with the news that he had at last returned to the lost mine, through the narrow defile to the north. But if he brought out any gold he kept it a secret to the day of his death.

Milt Farrell tried again in the 1920s, without success. Other lost mine prospectors attempted to solve the secret. None of these has ever acknowledged that he found the mine.

The latest rumor connected with the lost gold is that a cowboy hunting strays last fall found the canyon with its smoke-blackened walls and mine tunnels. But like others before him, this cowboy became confused when he attempted to return, after he had learned the significance of his discovery.

Then a pilot flying low over the forest of that section of the county told of seeing a deep, beautiful canyon containing stone walls standing in a maze of timber and brush. "Pot hunters," that species of amateur archeologists who dig for aboriginal pottery in defiance of the law, believed the pilot revealed the location of an undiscovered cliff ruin. They sought it, and purportedly did enter the canyon, only to come away disgusted because the ruins proved to be "some old Mexican buildings." Shocked when they learned the story of the lost mine, they returned to the area, using trucks to approach over a forest road with camping equipment and riding stock, certain they would have no trouble in going back in a matter of a few hours.

Today these pot hunters, experienced in forest and desert, are still

talking to themselves over failure to relocate the canyon.

There are many varied and somewhat weird stories of the lost mine. One, with the proof, is that of an easterner staying at a guest ranch in Oak Creek Canyon. Being a hiker, he often wandered off alone. This he did with a pack of grub and his camera, walking out of the canyon due west. Seven days later he reached the village of Perkinsville, which is many miles south of where the lost mine is supposed to be. He gave an account of stumbling onto a deserted and very old village in a remote canyon after three days of hiking.

Returning to Oak Creek his exposed film was developed and prints made. Nobody who heard his story was very enthused, for almost all the canyons of northern Arizona contain old dwellings of long gone inhabitants. The easterner went his way, but the photographer who made the prints copied a few for himself. They were of a beautiful canyon setting, the standing stone walls an interesting feature of the foreground. Then one of the men who had been in there and couldn't go back, saw the pictures. He almost swallowed his hat.

The pictures were studied carefully and letters written to the easterner for a detailed description, which he gave. All the same, the photographer and the man who had once been there failed to find the canyon.

The son of the photographer now took up the search. One of his high school chums was Melvin Halliday, who in 1939 discovered in the Flagstaff storeroom of a friend an old hide-bound book printed in Spanish. The date inscribed on the title page was 1730. He wanted the book as a souvenir, and it was then he heard the story of Howard bringing out two of them from the cave.

Halliday and the photographer's son planned to set out on their search. Then the war years intervened, and it was not until 1946 that Halliday found himself in the general area, and decided to make a try.

Accompanied by Robert Cahill, he attempted in a limited time to make the search on foot. They explored unknown canyons, walked out many square miles of tangled forest. Then one late afternoon they came upon an old fallen-in log bridge in an arroyo. This was a clue. For, according to Squires' story, he and his men had constructed such a bridge on the old Spanish trail that led in and out of the canyon containing the lost mine.

There it was, miles from nowhere in the virgin forest. No new trails, no roads within a long distance. But the signs of an ancient road were there on

the ground, marks on stones, a cleft winding around through the timber now grown up with smaller trees and brush.

But if this was the bridge, and they believed it was, then the lost mine was still more than three miles to the northwest. Worst of all, they had already been over part of the separating terrain and knew it was almost impassable in places, that flood waters had slashed deep canyons across the old trail. It was such country as could not be entered without supplies and a pack outfit.

Halliday and Cahill returned to their forest camp, abandoning their hunt for the lost mine. They are the only two men who have found clues to the mine who tell of their discovery without reservation. Hunters acting on their information have used Perkinsville as a jumping off place to search for the broken log bridge.

Some of the men with maps who have sought the lost mine are experienced trailsmen. Why then do they fail? The answer can only be that the canyon containing the lost mine and the village is what they term a "blind canyon."

As one old prospector puts it, "You could walk within spittin' distance of the rim an' not see it because the brush an' timber, an' all them plagued rocks is so numerous!"

Harriet Day New Director Palm Desert Art Gallery

Harriet A. Day, who for several years served as director of the former Desert Inn Art Gallery at Palm Springs, has accepted for the coming season the position as director of the Palm Desert Art Gallery in the foyer of the Desert Magazine pueblo.

Mrs. Day will take the place of Marie Ropp, whose interest and enthusiasm contributed much to the success of the gallery during the last two seasons. The new director has a wide acquaintance among the artists of the West and is unusually well qualified for the place she will fill in the Desert Magazine staff.

During the summer season when desert travel is at a minimum the art gallery will remain open only 5½ days a week. The gallery hours are from eight to five, and until noon on Saturday. Visitors are welcome during these hours. There is no admission charge.

On October 16 when Mrs. Day will assume her new duties the gallery will resume its 7-day-a-week schedule.



Photo taken "somewhere on the desert" by R. B. Lytle.

DESERT BENEDICTION

By ALICE SALISBURY
Barstow, California

Alice Salisbury, author of the book Desert Treasure, wrote this benediction for a little class of eight in a desert school which she was called to teach in an emergency. Each morning before the classes opened the pupils stood and raised the American flag and in unison repeated these lines—

May the desert mountains rising
Stark, aloof, benign about you,
Bless your sun-hot eyes with shadow;
Ease your weariness with quiet!

May the desert sunset lingering,
Flooding pearl-hued clouds with glory,
Paint the drab of life within you,
Flaming azure, gold and crimson.

May the desert wind at evening,
Bearing tang of sage in flower,
Stream against your heart and heal it,
Flowing on the far-off ranges.

May the desert stars above you,
Burning myriad friendly tapers,
Lift your spirit up to meet them,
Where they dwell, all-wise, eternal.

MY VACATION

By PRINCE O. MEYER
Tucson, Arizona

Some day I'll take a vacation,
Not a paid one 'cause I'll tell you why,
I don't want a string or relation
To anything under the sky.
No voices to hear I'll be wanting,
Except the one voice that I love
Of Nature whispering secrets
As she smiles all around and above.
I'll walk where no man ever ventured,
And that solitude shall be
Nature's golden symphonic creation
Her "Song of Eternity."
No poems, then, will I be writing
For all conceptions shall rhyme;
The contracts and copyrighting
Shall be signed by the hand of time.

Advancement

By TANYA SOUTH

Live then as rightly as you can,
And strive with every ounce and
sinew
To give the world the noblest man
That is within you.
Thus shall you swiftest make advance,
And finer faculties enhance.

Perspective

By JEAN CULVER
Hereford, Arizona

(By a lonely desert grave)

Well partner, I had thought that I
Was first to place my footprint in this spot.
Was this the haven where you chose to lie,
Away from every man, alone, forgot?

Partner, may I sit upon this knoll?
I am distraught with worldly matters deep.
Do cares like these disturb your peaceful
soul,
Or have you shed them in eternal sleep?

Say partner, could you set me true,
As you look back on time, does this brief
span
Rate all the worry that a man goes through,
Or should he take it happily as he can?

Yes partner, it is good to know,
You walked before me, struggled, and
found peace.
Now refreshed and rested, I must go,
The way looks lighter, and my burdens ease.

EVENIN' ON THE DESERT

By HELEN MONNETT
Phoenix, Arizona

Evenin' on the desert, and the sun is goin'
down,
And the vaulted sky is wearing flaming
tresses for a crown,
No more dingy cities where the sun cannot
get through,
But the great wide open spaces is the place
for me and you.

Evenin' on the desert and the atmosphere's
sublime,
And the beauties that I'm seein' were made
by hands Divine,
Not a cloud to mar my vision of the glitter
overhead,
Of the million miles of starlight in a lavish
overspread.

Evenin' on the desert, and the mountains
taller grow,
Like monarchs robed in purple, just to
stage a royal show,
And the realm o'er which they're reigning,
is a valley smooth and wide,
Where the sagebrush and the cactus with
the palms grow side by side.

Evenin' on the desert, and the sands have
turned to gold,
And each pebble bathed in moonlight is a
jewel to behold,
Like an artist on a canvas splashing color
here and there,
Catching every changing shadow, and the
moods that linger here.

Freedom? Well, I've got it, in this desert
warm and brown
Where all is peace and quiet when the sun
is goin' down,
And the purple shades are falling like a
mist within the vale,
O'er that silver winding pathway a desert
beaten trail.

Evenin' on the desert, and in twilights' soft
embrace
Is a memory that I treasure, in outline I
can trace,
All that made a day so lovely, as the sun
was goin' down
In the afterglow of evenin' in this desert
warm and brown.



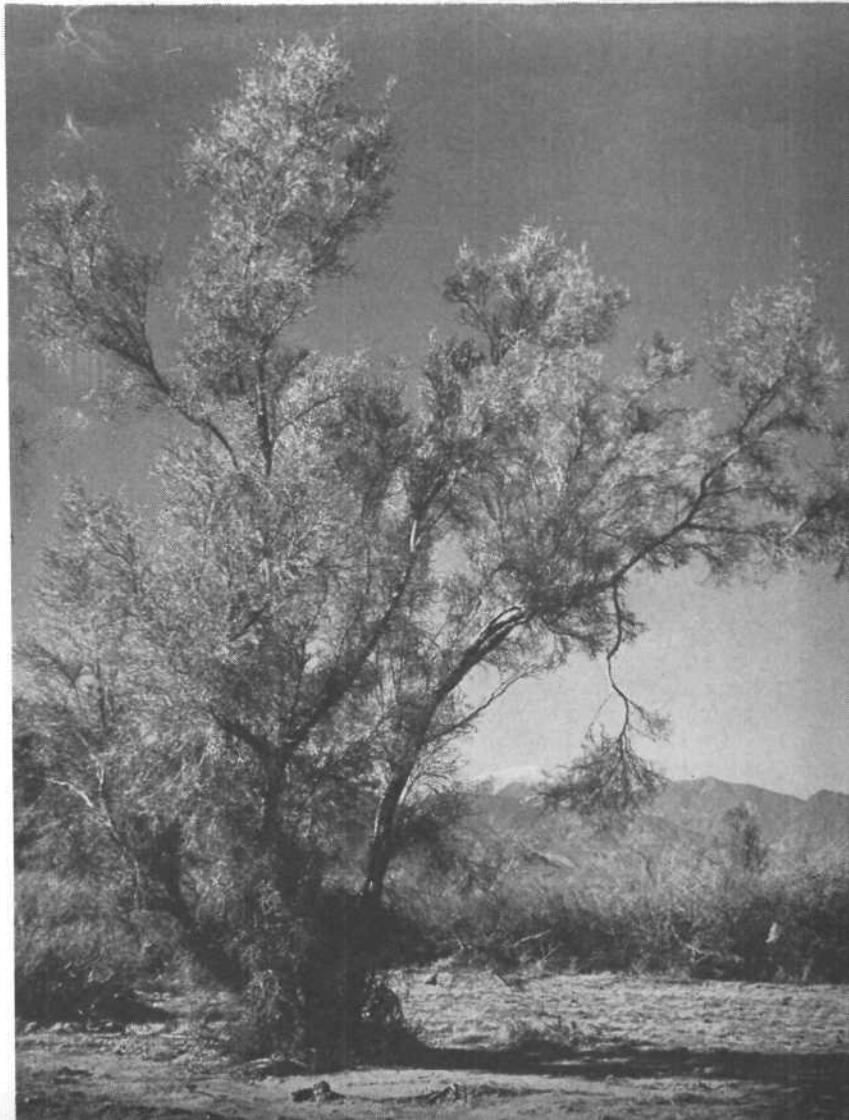
PICTURES of the MONTH

Desert Road . . .

First prize in Desert's May photo contest goes to Cal Montney, Los Angeles, California, for this striking scene in Joshua Tree National Monument. Picture taken at 4:30 in the afternoon of a winter day, with a Rolleiflex. Exposure 1/50 of a second at f.11, no filter.

Smoke Tree . . .

Winner of second prize is Tom Mulligan, also a Californian whose home is in Hermosa Beach. Taken near Palm Springs with Rolleicord camera, Plus X film, 1/100 sec. at f.11. Early afternoon, yellow filter was used.



LETTERS...

History of Ganado . . .

Los Angeles, California

Desert:

I write to correct a very unfortunate error which occurred in the news columns of your journal in May, this year, in an item from a Gallup, N. M. paper. Of course you are not responsible for the error.

In the item in question reference is made to the retirement from the Superintendency of the Presbyterian Mission to the Navajos at Ganado, Arizona, of Dr. Salsbury, who has been in that position for the past 23 years. The writer states that when Dr. Salsbury came to the mission he found "a few rude huts" there, and that he has transformed the little mission by the building program and improvements made under his supervision. I have no desire to rob Dr. Salsbury of a bit of credit rightly due to him; but the statement regarding the "few rude huts" is a very unjust reflection upon the work of the previous missionaries at Ganado, and reflects as well upon the Synod of Arizona, and upon the Presbyterian Church and its Board of Home Missions.

I was a member of the committee which selected Ganado for a mission site in 1901, and from the spring of 1907 until the autumn of 1913, I was the Missionary Superintendent for the Presbyterian Church in Arizona. I can therefore claim to have some knowledge of the facts. When I retired in 1913, there was at Ganado a well-built adobe manse, an excellent two-story adobe school building and dormitory for girls with quarters for two teachers, a good adobe hospital of two stories with six beds, and a very neat little stone church, all constructed under the first missionaries to this site, Rev. and Mrs. Charles H. Bierkemper.

Miss Mary E. Walther, now of Los Angeles, informs me that in 1921-22, she was secretary to Rev. Fred. G. Mitchell, who was for eight or ten years superintendent at Ganado; and that her work was mainly in connection with a building and improvement program carried on by Mr. Mitchell, the cost of which was about \$100,000. Recently I met a Miss Earhart who was at Ganado for some months after Miss Walther's time, and she told of other buildings erected under Mr. Mitchell. This certainly should dispose of the "few rude huts" tradition.

Let us give all proper credit to Dr. Salsbury for his work, but let us not deny to the equally earnest and efficient workers who preceded him, the

appreciation they deserve for pioneer work under very difficult conditions. I knew Mr. Mitchell, and he was a man of large ability and devotion.

I spent 22 of my younger years in Arizona (1891-1913) and always find much of interest in your admirable publication.

FRANK C. REID

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More About Pegleg Smith . . .

Ramona, California

Desert:

In your June issue on page 46 you explain why it became important to know which one of Pegleg Smith's legs was amputated. May I suggest that you follow the practice in vogue among Desert's thousands of readers and refer to Desert Magazine for the answer. In your issue of March, 1949, there is a full length picture of Pegleg Smith (1949 version) with the peg on his right leg.

About 1923 I found a book in the San Diego public library which gave what I regard as the most complete and authentic summary of the Pegleg story ever published. I tried repeatedly in later years to find the book again, but as I had forgotten the title the librarians were unable to locate it.

I believe I am correct, however, when I recall that there was a picture showing Smith wearing the peg on his left leg. I have delved rather deeply into the history of the pioneer days in this part of the country, and feel almost like an old acquaintance of Pegleg Smith of the black gold fame. There was another Pegleg Smith—not Jedediah—but he never was mixed up in any gold mystery. I may have a chance some day to show you where that black gold came from.

Yours for more and better desert stories.

J. R. KENNEDY

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Doodlebug for Silver . . .

White Pine, Colorado

Desert:

I take pleasure in writing to you about a silver locator I have just completed, and tested on two mines. I will guarantee it to work.

I have worked on gold and silver locators for 25 years, and my record shows over 5,000 experiments. I have tried all the doodlebugs and locators that have been offered for sale. Those instruments using batteries are okay but will not locate at a distance, and are too heavy to pack around. Mine weighs only four pounds.

All other doodlebugs have proven a fake to me. I am now waiting for the snow to get off the ground. In the meantime I am working on a gold locator with similar design for distance.

A. M. IVERSON

They Were Reinforced With Steel . . .

San Diego, California

Desert:

In the interesting article on the Davis dam, by Mr. Henderson, May issue, he describes the concrete stop-logs used in the spillway closure as being 2x2x13 feet in size, and as weighing six tons each.

It would be interesting to know how, and why, these stop-logs were formed to weigh so much. The dimensions given indicate 52 cubic feet, and as normal concrete weighs about 150 pounds per cubic foot the total weight of each-log would be about 7800 pounds, or 3.9 tons. If they do weigh 6 tons as stated, for the dimensions given the concrete would weigh approximately 230 pounds per cubic foot. If this is correct, it would be interesting to know why it was necessary. It is possible to make concrete of such weight per cubic foot, and it is sometimes done for the counter-weights of lift bridges to save space, by replacing the normal stone or gravel aggregate in the concrete with steel punchings or other steel scrap.

The stop-logs probably contain steel reinforcing bars—but even if each log contained a couple of very husky steel I-beams it still is difficult to account for the weights reported.

Mr. Henderson's article is a fine example of non-technical description of a complicated engineering project.

C. R. EGE

The stop-logs were well reinforced and the weight given was a workman's estimate rather than an engineer's calculation—which would account for the ton or more discrepancy.—R.H.

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Anyway, it Was a Long Time . . .

Glenwood Springs, Colorado

Desert:

We always look for the Desert Quiz, Hard Rock Shorty and those constructive editorials—and the mapped field trips are always welcome.

A few days ago we looked up John Condon, about whom Harold Weight wrote in the April issue of Desert. We found him just as described by Harold.

I was bothered by the mathematical implications of the statement in the Weight story as to the dating of the dinosaur age—"a period 20 million times longer than that of our own self-recorded history."

Placing our historic period conservatively at 6000 years, that would make the Mesozoic era 120 billion years ago, while most estimates place the age of the earth at two or three billion years.

ROGER GREEN

He Followed the Trails of the Desert Padres . . .

THE TRAPDOOR in the high ceiling of the old stone structure looked like any ordinary trapdoor, but to the young historian from Texas it could be the open sesame to veritable treasure. It was two days since the visitor from across the border had arrived in the picturesque town of Queretaro, 100 miles north of Mexico City, and knocked at the venerable gate of the College of the Holy Cross. During those two days the visitor had engaged his hosts, members of the Franciscan order who conducted the college, in pleasant conversation. He had admired the monastery grounds and examined the books in the fine old library. Although he wished to come straight to the point and inquire about the object of his search, experience in this land of manana had taught him to make haste slowly.

At last, when the moment seemed opportune, he pointed to the trapdoor above his head and nonchalantly asked, "Do you think there might be *papeles*—old manuscripts—up there?"

The two padres were somewhat taken aback at this direct question, and after a long moment the spokesman for the pair answered noncommittally, "Quien sabe—who knows?"

The disarming smile of the visitor and his evident interest in their monastery finally allayed the suspicions of the padres, and a ladder was produced. Up this ladder and into the attic, under the watchful gaze of his hosts, scrambled the professor. Sure enough, there in the dark recesses of the dusty loft stood a huge 18th-century chest—securely locked. This trunk might or might not hold what he sought. After prolonged scouting about the monastery a key was unearthed and, to the wonderment of all, there were revealed inside the chest bundle upon bundle of neatly tied manuscripts, priceless records of colonial New Spain.

The search for gold has lured countless men in ages past, but the search for dusty archives long buried in Spanish America and continental Europe has brought more thrill and lasting renown to historian Herbert Eugene Bolton than the finding of treasures in gold and jewels.



Dr. Herbert E. Bolton

For more than 50 years Dr. Herbert E. Bolton has been following the trails blazed by the soldiers Coronado and Anza, and the padres Kino, Escalante, Garcés, Font and others. He has examined and translated a million pages of original manuscripts found in attics and vaults in Spain and Mexico. Out of this research have come the most important books yet published covering the discovery and early exploration of the Southwest—books well known to every student of American history. Here is the story of an 80-year-old professor who is too busy to retire.

By HOPE GILBERT

Photos courtesy Coronado Cuarto Centennial Commission
of New Mexico



Dr. Bolton writing up his notes in the patio of the Hotel Coronado at Compostela, Mexico.

When, at the turn of the century, two years after receiving his degree of Doctor of Philosophy at the University of Pennsylvania, Bolton left his Wisconsin home to teach medieval history at the University of Texas, his friends regretted his exile to a land of rattlesnakes and wild Indians. No one dreamed that in Texas and adjacent Spanish country this Yankee invader was to discover a bonanza of historical material which eventually would completely reorient the study and teaching of American history.

It was nearly a half century later that I had the pleasure of talking with Dr. Bolton in his Bancroft Library office at the University of California. The windows of his book-lined study looked out upon the campanile and the Berkeley hills close in the eastern background.

Time, as noted by the great campanile clock, means little to Dr. Bolton. More than in the present he lives in the historic past of Mexico and the Spanish West. The men who explored, colonized and Christianized that vast territory are to him living, breathing personalities, almost more real than people of the present day. His enthusiasm for the exploits and accomplishments of the conquistador and padre is very sincere. He infects everyone who comes within the orbit of his influence with the desire to travel with him the trails of the Spanish pathfinders.

Although his professional interest is in the past, it should never be said

that Bolton is indifferent to the present. He has a vital interest in his many students who have taken degrees under him and who today hold distinguished professorships throughout the country and diplomatic posts abroad.

I became acquainted with Dr. Bolton several years ago when I was studying for a master's degree in history. At that time I learned at first hand about his reputed absent-mindedness when he is engrossed in research and writing. Many's the time that he had to be reminded to attend the seminar of which I was a member. His light shone so continuously and late in his fourth-story office that his students threatened to form a "Save-Bolton-from-overwork" league to see that he did not work straight through the night. His rejoinder to this suggestion was that he purposely left his light on just to give his students and colleagues something to talk about.

One tale that persistently crops up on the campus is that late one afternoon Bolton was standing at the curb outside North Gate when one of his daughters drove up and humorously said to him, "Dr. Bolton, may I drive you home?"

"Thank you," replied her preoccupied father, "but I am waiting for my daughter."

The good professor stoutly denies this legend, adding that, quite to the contrary, he sometimes jumps uninvited into cars containing women he doesn't know.

Dr. Bolton is a genial host, gracious

in extending courtesy to an interviewer. He is always ready to talk about his favorites, Anza, Kino, Coronado, Garces, Escalante, and a dozen others, but reluctant to talk about himself.

"I don't count," he asserts with a grin. "The trail-blazers of the past, and you, the builders for the future, are my concern."

When Dr. Bolton arrived in Texas in 1901, the Spanish language was a closed book to him, but not for long. During his first semester he began to study the language which was to open up to him an unbelievably rich field of discovery. One of his tutors to whom he paid sixty cents an hour was Will Buckley who later became a millionaire oil king. More and more the Spanish borderlands fascinated him, and the following year he went to Mexico to search the archives of church and state, and to get acquainted with his Mexican neighbors.

The Spanish bureaucrats of the colonial period had a mania for demanding, usually in triplicate, the most detailed reports of all activities, military, civil and religious. To this custom we are indebted for our broad and accurate picture of Spanish America in that era.

Once having felt the thrill of looking upon diaries, letters and documents, many of which had not been opened since they were penned and filed away centuries ago, Bolton was unable to stop. So, for the next 20 years he spent much of his time doing research in Spanish America and Europe. He traveled the length and breadth of Mexico, visiting government archives and old monasteries, making friends with officials and padres, and sifting the records of 65 repositories. In the *Archivo General* in Mexico City alone more than 100,000 volumes of bound manuscripts were stored, not to mention the countless unbound records lying untouched in numerous pueblos and obscure *conventos*. Bolton is reputed to have dusted off, untied and examined altogether a million manuscript pages of ancient records. In 1913, with financial aid from the Carnegie Institution, Bolton's "Bible" for researchers in Spanish-American history was published. This *Guide to Materials for United States History in the Archives of Mexico* became in fact the official catalogue used by the Mexican government for their own records, and called by them *La Biblia*.

Many of the manuscripts discovered by Dr. Bolton are of especial interest to those of us who now live in areas which once were outposts of the Span-

ish empire. The *Favores Celestiales* written by Eusebio Kino is an illuminating report of the work of that Italian Jesuit missionary among the Pimas of Sonora and Arizona from 1689 to 1711. The *Noticias* of Fray Francisco Palou, which forms the first history of California ever written, and the diaries of Crespi, Font, Anza and others give us a picture of 18th-century California, and of the means and routes by which the pioneers came. The assembling, translation and editing of the diaries and correspondence of the Anza expeditions from Sonora to Monterey and San Francisco, constitute but one of Bolton's great contributions to the background of Southwestern and California history.

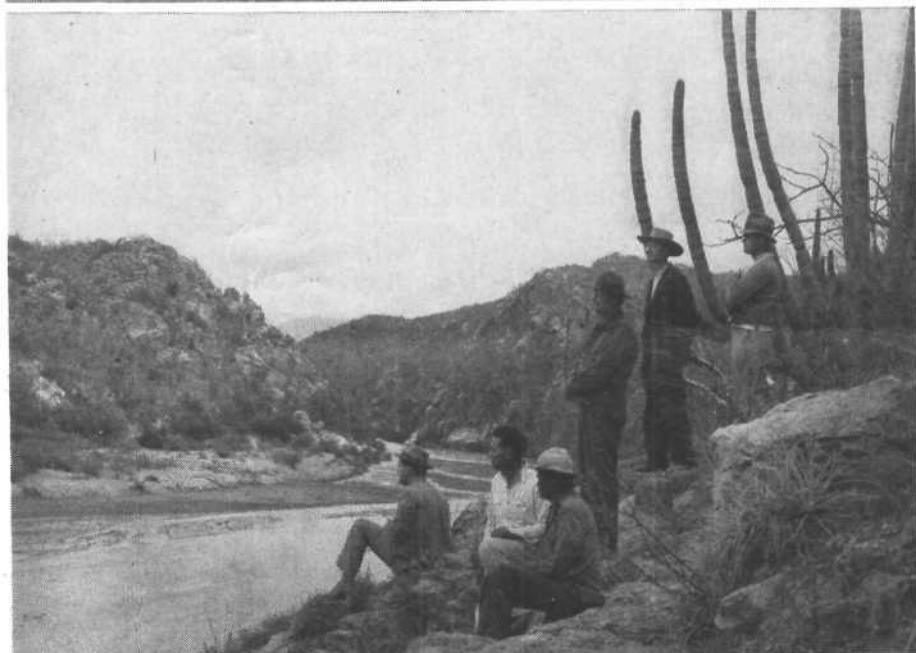
Of the books written by Dr. Bolton, those of most popular interest include *Rim of Christendom* and *Padre on Horseback*, two publications about Padre Kino; *Outposts of Empire*, the story of the expeditions of Juan Bautista de Anza and the founding of San Francisco; *Spanish Borderlands*, and *Spanish Exploration in the Southwest*. Commenting on his writings, the *American Historical Review* says, "Bolton masks his broad yet exact scholarship under an entertaining, even colloquial style." He is never stodgy nor textbookish. "A textbook," avers Bolton, "is the pulp of an orange that has been sucked dry."

Bolton's most recent volume covering the exploration and journeys of Coronado was awarded the Whittlesey House prize in Western History. In its preparation he explored Coronado's entire route from Mexico to central Kansas, and cleared up the many puzzles which had stumped his predecessors, even to the determination of the declination of the compass needle in 1541 in the Texas Panhandle.

Top—Outside the old mission church at Tehuaco, Mexico. As the front wall of the building had fallen down the townspeople mounted the bells in front of the site. Left to right: Ward Yaeger, National Park Service; George P. Hammond, Bancroft Library, U. of C.; Aubrey Neasham, National Park Service; Dr. Bolton.

Center—Retracing Coronado's route—on the banks of the Yaqui River near Soyopa. Dr. Bolton stands behind the three seated men.

Bottom—Retracing the Coronado route in 1940. Dr. Bolton's car was towed across the San Lorenzo River—the ancient Amazon of California legend.



"Equally as intriguing as my adventures in archives," comments Dr. Bolton, "has been my odyssey on the trails of Kino, of Coronado, and of Anza. Kino's trail took me from his birthplace in the Italian Alps, through Germany, to Spain, to Mexico, to Lower California, and thence by a network of routes over the Sonora mountains to the Sierra Madre of Chihuahua.

"Eusebio Francisco Kino," he continues, "was the most picturesque missionary pioneer of all North America—explorer, astronomer, cartographer, mission builder, ranchman, cattle king, and defender of the frontier. For a quarter of a century Kino was the outstanding figure on the Sonora-Arizona-California frontier. A score of present-day towns and cities began their history as mission pueblos founded by him or directly under his influence. Over a vast area in the Southwest and adjacent Mexico, cattle ranching and the introduction of European cereals and fruits owe to him their beginnings. Wheat raising in Alta California, to give a single example, was begun with a handful of seed sent by Kino from Mexico across the Arizona desert to the Yuma chieftain, Salvador Palma, whom he had formerly visited on the Colorado river. Kino's maps of western North America made him famous in Europe even in his own day, and with or without acknowledgment they were copied there by cartographers for nearly a century after his death. His manuscripts constitute by far the best contemporary historical record of the regions where he labored."

Father Kino's own story, *Historical Memoir of Pimeria Alta*, translated and edited by Dr. Bolton, has recently been reprinted by the University of California press and is now available to collectors of Americana.

Bolton speaks with pardonable pride when he states, "I think it is safe to say that no routes of such length in any country's history have ever been so thoroughly explored and identified as I have explored and identified the trails of Anza. From Mexico City to Monterey and on to Suisun Bay I have retraced exactly, or approximately, his several journeys—a total distance of more than 10,000 miles."

Anza made two round-trips from Mexico across the Colorado desert and the southern Sierras to the northern coast of Alta California, the first as a scout to discover a feasible route, and the second at the head of a colony of 240 men, women and children, the founders of San Francisco.

The underlying reason for Anza's opening of a new land route from

Mexico to California, 1774 to 1776, is of interest to us today as an 18th-century phase of that long contest for power between European nations. The close of the Seven Years War in 1763 made important changes in the North American map. The French lost their possessions there, and England, then mistress of all the territory as far west as the Mississippi River, was becoming a serious threat to Spain which held the vast territory west of the Mississippi. On the Pacific coast, Spain beheld a further threat to her colonial empire from Russia which was covetously eyeing the Pacific shores from her base in Alaska. To withstand the English and the hostile Indians, Charles III of Spain ordered the extension of a line of presidios along the Mississippi and from the eastern reaches of the Gulf of Mexico to the Gulf of California. To forestall the Russian danger, Portola and Serra were sent to occupy the harbors of San Diego and Monterey. To insure the safety of Alta California, actual settlement was essential. And so it was that Juan Bautista de Anza, a captain on the Sonora frontier, was selected to prepare for colonization of the Pacific coast by opening a land route from Sonora to California.

Of the extraordinary capacities of this Spanish soldier, Bolton says, "As an explorer Anza stands beside Lewis and Clark. As a colony leader it is difficult to find anyone in Anglo-American annals with whom to compare him, unless it might be Stephen F. Austin. His achievement was a significant factor in the long contest of European peoples for the domination of a continent."

Although Bolton traced Anza's trail nearly a century and a half later, Anza and his fellow diarists, Fathers Pedro Font and Francisco Garces, were so explicit in their records that there was little difficulty in identifying practically every water hole and campsite they visited.

"Between Mexico City and Culiacan, where Anza began to raise his colony," states Bolton, "I have followed his approximate route by railroad. From this point to Horcasitas I retraced Anza's approximate trail nearly all the way by automobile. Up to this point no diaries were kept. We know that Anza went through Mocorito, Sinaloa, Fuerte and Alamos, and through these places I have followed the *Camino Real* which he traveled. At Horcasitas, where the diaries start, my exploration in detail began.

"From Tubac to Yuma," he continues, "Anza's route led me by way of the Altar Valley and the *Camino del Diablo*, or Devil's Highway, in north-

ern Sonora, to the junction of the Gila and Colorado rivers. On this extremely arid portion of the trip I was accompanied by Dean Frank C. Lockwood as camp boss and cook, and by two University of Arizona boys as drivers. El Carrizal was the last place with running water before reaching Yuma, over 100 miles distant. During the gold rush to California, scores of gold-mad men met death in this stretch of burning desert. Their last resting places are now indicated, if at all, by rude piles of stones near the dimly marked roadway.

"Ten miles out from El Carrizal Anza crossed the modern Arizona boundary line. Water now became a question of tanks or *tinajas* in the mountain rocks. Of the many tinajas which I identified, the Cabeza Prieta tanks, called by Anza *las Tinajas de la Purificacion*, were especially remarkable. The high black peak from which they get their name towers just west of them. It was the breaking of a spring of my car and the consequent day's delay that gave me time for the difficult 14-mile walk necessary to visit the Cabeza Prieta tanks where Anza revived his thirsty caravan. The six main tanks are on six different levels, like the steps of stairs, close together and easily accessible to each other, the overflow of all being drained by a common channel worn through the ages in the solid rock. The tinajas are symmetrical and are generally kettle-shaped. The largest is 14 feet in diameter on top and five or six feet deep. It has been estimated that these tanks when full contain about 5000 gallons of water." Bolton adds, "It was in this region that Teddy Roosevelt won his fame as a hunter of mountain sheep in Arizona.

"From Yuma down the Colorado," continues Bolton, "I trailed the hard-riding captain to Santa Olaya, below the western terminus of the Arizona line and not far above Pescadero dam, thence across the desert to Cerro Prieto, through Cocopah range near Signal mountain, past the head of the Laguna Salada to Anza's Santo Tomas in the mountains of Lower California. Retracing the canyon, I followed the trail northward to Santa Rosa (at Yuha Well), to San Sebastian (at Harper's Well), thence up Borrego Valley to Coyote Canyon at Beatty's ranch.

"For the short stretch up and down Coyote Canyon and across Cahuilla Valley I had as my assistant W. G. Paden who, with Mrs. Paden, has subsequently become an outstanding authority on pioneer trails of the West. The Coyote Canyon section was made on horseback with the thermometer

114° at sunrise at Beatty's ranch. I retraced Cahuilla Valley and ascended Bautista Canyon in 1924. From Valle Vista to Riverside and on to San Gabriel I have been many times over most of the trail. Northwest from San Gabriel to Monterey I followed not only the trail of Anza but also the footsteps of Serra and his co-workers.

"So long a trail," Bolton reminisces, "has had its incidents. While crossing over the mountains from Magdalena with my lone son and a single horse, I was glad when we got through the canyon where the Yaquis just a few days previously had waylaid half a dozen Mexicans. Anza had his problems with thirst-crazed and starved horses and pack-animals. My companion and I were often beset by balky cars unaccustomed to the rigors of desert travel. It was not wholly amusing to have my Ford sit calmly down in the middle of the Sonora river near Ures and wait for a span of mules to come along and pull us out. It was diverting, however, to see the *macho* refuse to work, kick himself out of harness, and let his mate, the *mula*, pull the machine out alone, the *macho* appearing to have great contempt for the old Ford which we drove. Because of our delay we spent that night at a very humble ranch house by the roadside. I abused my hospitality by talking to the family and their assembled neighbors till midnight, telling tales of Anza and his colony. I, at least, profited from the session, for I was weary enough to sleep soundly on the soft side of an adobe brick floor, jokingly called by our kindly hostess *una cama de esprings*—a spring mattress."

Some persons may ask what difference it makes by what route Anza came to California. "One illustration," states Bolton, "will answer that question. From Yuma to Riverside, Bancroft's identification of the route was entirely wrong. On the way Anza saw and mentioned numerous Indian villages. Led astray by Bancroft, ethnologists for a generation located them where they never lived; and in some cases the error still persists. Somebody has to get the record straight or it will always be crooked."

From the University of Texas where he began his Spanish-American research, Bolton went to Stanford University where he was professor of history for two years. In 1911 he went to the University of California where later he became director of the famed Bancroft Library and later Sather Professor of History. In 1940, at the age of seventy, Bolton was officially retired, but not for long. The demands of the war called him back into active

teaching, and his time since then has been additionally filled by conferences and lectures on Inter-American affairs, exploration, and his perennial research and writing of books. A 200-mile descent of the Colorado river with the late Norman Nevills on one of the latter's most speedy and exciting trips (when at Bolton's insistence only one portage instead of the usual six or seven was resorted to) was but one incident in a series of exploring jaunts indulged in by the indefatigable Bolton since his official "retirement."

Numerous honorary degrees, honorary professorships in Spanish-American universities, and his decoration as *Comendador de la Real Orden de Isabel la Católica* by the Spanish Crown in 1925 attest the importance of Bolton's achievement in synthesizing and unifying the history of the Western Hemisphere and in setting forth for the first time the Epic of Greater America.

THE *Desert* MAGAZINE CLOSE-UPS

She Broke an Old Precedent . . .

Desert Magazine editors receive hundreds of fiction manuscripts annually—and it has always been the policy to return them to the writers with the notation, "Desert is not in the market for fiction."

This was true until two months ago when Margaret Mower's story *Without Pawn* came in the day's mail. Here was a well-written drama which went to the heart of one of the most interesting problems in the desert country—the racial enmity that has long existed between the nomad Navajo Indians and the peace-loving tribesmen of the pueblos.

Here was a problem in human relations which could be told better in fiction than in a mere factual article—and so the long precedent of no fiction (except Hard Rock Shorty) in Desert Magazine was broken. The general policy of the magazine has not been changed. Fiction will be published only when it appears to the editors that accurate dramatization will give Desert's readers a clearer picture of the subject than will a non-fiction article. The editorial staff will be interested in the comment of readers—for after all they are the ones to be served.

Margaret Mower was born in Santa Barbara, California, but spent much of her life in the East in the theater. More recently she has taken up writing, and has sold manuscripts to the Monitor and to travel magazines.

Dorothy Stauffer, painter and mu-

To all photographers:

Desert Magazine's monthly photographic contest is to be discontinued during the late summer and early fall months, but will be resumed during the winter. This recess is announced due to the fact that not many pictures are taken on the lower levels of the desert country during the hot months.

The contest for the "Picture of the Month" definitely will be resumed later in the year, and all those who take pictures—both amateur and professional—are urged to send their unusually fine prints to Desert for the monthly judging when the contest is announced again.

ralist of the Southwest, who sketched the illustration for *Without Pawn*, is a Californian now making her home in Santa Fe. She was graduated from Stanford, and has studied art in Paris and Italy. She has exhibited at the Philadelphia Print Club, in New York and in Paris. She is the mother of an 18-year-old son.

• • • Jackrabbit Homesteader . . .

Catherine Venn left a high-salaried position as secretary to members of the Los Angeles city council to spend a year on her jackrabbit homestead at the base of the Santa Rosa mountains in Riverside county, California. Being red-headed, the prospect of living alone in this rugged desert country held no fears for her. She had to haul her water from a well three miles away, cook with tank gas, and read with a coal-oil lamp. But to her it was all a grand adventure. She did part-time work in offices in the Palm Desert community, but had many days of leisure during which she gained an intimate acquaintance with the plant and animal life of the land where her little cabana was located.

She kept a log of her experiences, and the *Diary of a Jackrabbit Homesteader* which is to continue serially in Desert Magazine, is her story—the story of a tenderfoot who within a few months was able to adapt herself happily to a way of life far removed from anything she had known previously.

At the end of a year Mrs. Venn had to return to her city hall position in order to protect her civil service seniority, but she continues to spend much of her spare time out on her desert homestead, to which she now has a deed.

MINES AND MINING . . .

Winnemucca, Nevada . . .

Although discovered by J. M. Mullinix several years ago, a promising barium property in Humboldt county has just been staked and surveyed and is to be opened this summer, it was announced here. Partners in the venture are J. M. Mullinix and Jack Tomlinson. Tomlinson said surface indications show 10,000 to 15,000 tons of good ore running from 94 to 96 percent white barium. The property is located about 15 miles southwest of Winnemucca on Clear Creek. Barium is used for industrial chemicals, mixing paints and for oil well packing.—*Humboldt Star*.

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Kingman, Arizona . . .

Discovery of an enormous manganese deposit, considered to be one of the largest in the United States, has been announced by the U.S. Bureau of Mines. The bureau has been conducting extensive diamond drilling in the Artillery Peak district. The mineralized zone extends from a point several miles northeast of Artillery Peak for about 25 miles southwest. Adjoining is another large deposit being developed by D. D. Corum. At the southwest end of the new zone John Neal, Kingman cattleman, and Tom Rodgers, Alamo Crossing, are developing another deposit. The ore is massive, in lime formation, is exceptionally clean. Assays gave results of 23 percent to 41 percent manganese, virtually free of iron, copper and phosphorous and with a low silica content. —*Mohave County Miner*.

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Beatty, Nevada . . .

Core drilling of the Lucky copper property to considerable depth is planned by Looney Brothers of Beatty. The mine is located in Lathrop Wells district 33 miles south of Beatty. It has been under development about a year, is credited with containing a vein of copper ore about 30 inches wide. The operators contemplate eventual installation of a reduction plant if the drilling proves satisfactory values persist to greater depth.—*Beatty Bulletin*.

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Winnemucca, Nevada . . .

Another important mining operation in Round Mountain is underway with opening of the Steigmeyer property. Ore being mined is a shale gold, the value is low, but up to 1000 tons a day will be mined by shovel.—*The Mining Record*.

Ely, Nevada . . .

First test well to be drilled in Nevada by a major oil company was scheduled to be started this month by the Continental Oil Company about nine miles northwest of Green Springs. Plan is to drill to a depth of 7500 feet, possibly deeper. Continental and Standard Oil of California are also reported planning drilling of exploratory wells in Newark Valley where promising oil indications were reported last year. Approximately 500,000 acres of government and private land in Elko, Eureka and White Pine counties were leased during 1949 by major oil corporations.—*Los Angeles Times*.

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Holbrook, Arizona . . .

The first oil to be produced in Arizona may come, it is hoped, from a well that is being sunk as a test well. It is the Macie No. 1 of Kipling Petroleum, Inc., located 41 miles east of Holbrook and four miles south of Navajo. At the 1000-foot level the operators unexpectedly tapped a gas deposit which at the start shot 20 million cubic feet per day from the shaft. Oil traces, coupled with the sudden discovery of gas, raised hopes that the well would produce the first oil in Arizona.—*Tucson Daily Citizen*.

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Tonopah, Nevada . . .

The famed Belmont mine, credited with production of \$40,000,000 in silver and gold between 1906 and 1925, has been acquired by the Victory Divide Mining Company from F. W. Handel and Tom Niceley. At one time the Belmont was the largest individual producer of silver in the United States. When the price of silver dropped to around 25 cents in the 1920's, operation was suspended. When the price recovered, the mine was reopened and another million dollars taken out before a fire and World War II again forced a shut down. The mine has been worked recently by leasers.—*Tonopah Times-Bonanza*.

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Goldpoint, Nevada . . .

The Nevada Gold mill near here has resumed ore treatment and is to be reserved exclusively for custom ore, according to John G. Gargan, president of the San Francisco Engineering and Mining Corporation, which has leased the plant. A sufficient supply to keep the plant in operation for at least six to eight months has been assured, he said. —*Goldfield News*.

Los Angeles, California . . .

A pocket size radiation indicator so simple that even a greenhorn can understand and operate it, has been developed at the University of California at Los Angeles' Atomic Energy project. The "instrument" consists of small vials which can be carried in a plastic case and worn around the neck in the manner of identification tags, or the vials may be fitted into a pencil-like container that is clipped in a pocket. Radiation is measured by color change of the chemical liquids.—*Rocketeer*.

• • •

Washington, D.C. . . .

Surveys and exploration of the uranium fields around Marysville, Paiute County, Utah, will continue throughout the summer and there is a good possibility that a mill to process ore will be constructed, the Atomic Energy Commission has announced. The area — where uranium-bearing ore was discovered only a few months ago—is regarded as among the most promising of domestic sources. No decision on construction of a mill can be made until the surveys are completed.—*Salt Lake Tribune*.

• • •

Tonopah, Nevada . . .

What appeared to be an important strike of rich silver-lead-gold ore has been announced by Hugh F. Cameron, president of Pacific Butte Mines company. The discovery was made on company ground located at Montezuma, a few miles west of Goldfield. The ore was first encountered in a winze at a depth of 18 feet below the main tunnel level of the Eve claim. Assays gave returns of \$25 gold, \$11.60 lead, \$112.50 silver. This is first time that ore carrying a commercial value in gold has been mined on the Eve claim.—*Tonopah Times-Bonanza*.

• • •

Ely, Nevada . . .

The oil fever which last month was reported running high in this area has not abated. Seventy-five thousand additional acres in White Pine county were taken under lease recently in a three-week period, and large blocks of land in eastern White Pine, hitherto barren of leasing activity, have appeared on maps. In western parts of the county fill-in leases continue. Nearly 900 oil lease entries have been made to date. —*Ely Record*.

• • •

Monticello, Utah . . .

A new uranium strike has been made in McElmo Canyon 17 miles from Cortez, is to be worked by the Four Corners Uranium Corporation, a recently-formed company. —*San Juan Record*.

HERE AND THERE ... on the Desert

ARIZONA

Here We Go Again ...

TUCSON—Of the scores of lost mines for which prospectors search in Arizona and over most of the desert Southwest, the Lost Dutchman is said to be the richest. And now a Los Angeles woman says she has found the fabulous gold mine. She has asked the Interior Department's bureau of land management in Washington how to go about claiming it. The bureau is constantly receiving notices from people claiming to have found lost mines. Several have claimed to have located the Lost Dutchman. Latest claimant is Miss Celeste Maria Jones. The bureau has sent her printed instructions on establishment of mining claims.—*Tucson Daily Citizen*.

Abolish Indian Bureau—Salsbury ...

GANADO—The Navajo tribesmen of Arizona and New Mexico would be much better off if the U. S. Indian Bureau were abolished. This is the opinion held by Dr. Clarence Salsbury, one of the best friends the Navajo have had, as he looks back on a quarter century of missionary work on the reservation. Dr. Salsbury and Mrs. Salsbury are beginning a year's leave prior to retirement. He has been superintendent of the Ganado Presbyterian mission and Sage Memorial hospital.

Dr. Salsbury has long been an outspoken critic of the Indian Service. His years with the Indians have convinced him that both the bureau and the reservation should be done away with. "The Indians should be made in every way the fine citizens they are," he declares. He has high regard for the hard-working government employes on the reservation, believes root of the Navajo plight "lies at headquarters in Washington."—*Tucson Daily Citizen*.



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Off-Reservation Jobs Essential ...

FLAGSTAFF—Off-reservation jobs and homes must be found for 30,000 of the 65,000 Indians now living on the Navajo reservation, according to Alan G. Harper, reservation superintendent. At Flagstaff recently he said that numerous investigators have agreed that resources of the reservation—much of which is barren desert—cannot possibly support more than 35,000 people. "Finding new homes and jobs for the 30,000 now in excess of the maximum is one of the Indian Bureau's major objectives," he declared.—*Coconino Sun*.

Water from Flooded Mines ...

TOMBSTONE — If the City of Tucson could use 5,000,000 gallons of water a day, the water is available in the flooded mines of Tombstone, known nationally as "the town too tough to die." And it is crystal clear, high altitude water excellent for domestic use. In a letter to the Tombstone chamber of commerce, Paul O. Gottschling, San Diego, California, outlines a plan for construction of a 60-mile gravity flow conduit from the mines surrounding Tombstone to Tucson. The mines were flooded in 1886. Attempts were made in 1890 and again in 1902 to lower the water level by pumping, but with little success.

Mrs. J. H. Macia, an old-timer in Tombstone, says she can remember

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FRED AND JESSIE PORTER welcome you to SHOOT!!! your pictures of "Ghost Town of Calico" and mountains in miniature, at the "POW-WOW" Trading Post, Hiway 91, Yermo, Calif. The hub of Rock-hounds of Paradise. Crystals, cutting material in rough or slabbed. Uranium, highly fluorescent, and specimens. Miniature cactus, gifts and souvenirs.

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PANNING GOLD — Another hobby for Rock Hounds and Desert Roamers. A new booklet, "What the Beginner Needs to Know," 36 pages of instructions; also catalogue of mining books and prospectors supplies, maps of where to go and blueprints of hand machines you can build. Mailed postpaid 25c, coin or stamps. Old Prospector, Box 21 Dutch Flat, California.

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FOR SALE—PACK STATION in the High Sierras. Completely equipped and furnished, including winter ranch in valley. Good season ahead. Paradise for fishermen, hunters, shutterbugs and rock hounds. \$13,500 if sold immediately. Write Harry Hagen, Bishop, Calif. Gen'l Del.

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when from 7,000,000 to 11,000,000 gallons a day were pumped from the mines, but the underground supply appeared virtually limitless.—*Tucson Daily Citizen*.

Archeological Society Growing...

PREScott—Although the charter membership list has been closed with a total of 48 on the roster, the Yavapai County Archeological society will still accept memberships from persons interested in archeology—and the society expects to grow. Meetings such as the one held May 16 are attracting comment, as is planned field work of the society.

"Among the Arizona Cliff Dwellers" was topic of a talk given by Mrs. Charles Leake, granddaughter of the famous John Wetherills, traders to the Navajos, at May meeting of the society. Mrs. Leake was born in the John Wetherill house at Kayenta, Arizona, and spent much of her early life among the Navajo tribesmen. She was interested in cliff dwellings as a child, starting with Mesa Verde, later studied ruins at Montezuma Castle, Wupatki, Casa Grande, Betatakin and numerous small caves over the Southwest.

Last of the Medicine Men...

YUMA—Juan Chicken, last of the medicine men of the Quechan Indian tribe, died early in May and his body was cremated at Yuma. Proper ceremonies committed his spirit to the gods. He was one of the few members of his tribe who knew its ancient lore and legends. He had taught his people to conduct the Karook, or tribute to the dead.—*Gallup Independent*.

Vandals Doing Their Work...

SEDONA—Century plants in this area—which take from 25 to 75 years to mature before they bloom—may be virtually wiped out by vandals if something isn't done, local residents say. During the past two years many century plants have been cut and hauled away. They usually are sawed off just before they bloom. This means they do not scatter their seeds—and there are fewer and fewer new plants starting. Cutting the plants is unlawful.—*Coconino Sun*.

Town's Founder Is Gone...

CHANDLER—Dr. A. J. Chandler, one of Arizona's best known pioneers and the man who founded the town of Chandler, died May 8 near the San Marcos hotel which he built. He was 91. He was a resident of Arizona for 63 years, since 1887. He did some of the first irrigation development in the state, was a pioneer in Arizona's resort hotel business.—*Yuma Daily Sun*.

Yuma County to Have Fair . . .

YUMA—The agricultural committee of the Yuma County chamber of commerce and representatives of leading agricultural organizations have decided that Yuma county should have a fair. A special sub-committee was appointed to investigate possible sites and select dates which would be most satisfactory for showing of livestock and a majority of crops produced in the Yuma area. Imperial county, across the Colorado river from Yuma, has an annual Mid-Winter fair that attracts nation-wide attention.—*Yuma Daily Sun*.

• • • Add Desert Wildlife Lore . . .

YUMA—Ten minutes exposure to the direct rays of the desert's summer sun will kill a sidewinder. At least that was the result when a recent test was made in Yuma county, and the Fish and Wildlife Service took a picture of the dead snake to prove the point. It is pointed out that snakes do not perspire and that a thermometer laid in the hot desert sand will register temperatures as high as 167 degrees Fahrenheit. Maybe that is why reptiles usually dart from one protective rock to another.—*Yuma Daily Sun*.

• • •

STANFIELD—This entire Arizona town has been bought by Dr. Charles E. Fitzgerald, Long Beach, California. The price paid was \$209,000. The three-year-old village is located between Tucson and Phoenix. The town draws its business from the 12,000 to 14,000 migratory and permanent workers employed on 55,000 acres of nearby farm land. —*Los Angeles Times*.

• • •

WASHINGTON—Construction of an earthfill dam on the Gila river near Sentinel, Arizona, to protect Yuma County and portions of the lower Imperial Valley of California from floods, has been authorized by congress. The project is included in the public works bill which calls for expenditure of \$1,730,000,000 on rivers, harbors and flood control.

• • •

Construction of a new highway bridge across the Colorado River at Yuma is announced as one of the major projects of the highway committee of the Yuma County chamber of commerce this year.—*Yuma Daily Sun*.

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Indian Chief 127—Maybe 137 . . .

PALM SPRINGS—Some say he is 127 years old, others say 137 or 139. Louis Levi himself doesn't know, but the aged Indian chief does believe he is the world's oldest living human and says that in another year he will bid his descendants goodbye and go to join his ancestors in the Happy Hunting Ground.

Louis and his family live on the Torres Indian reservation in Coachella Valley near where he was born. As a boy he lived with the California Mission Indians, in later years became their leader and held authority over the tribes from Santa Rosa to Coachella.

Although Louis' age cannot be established, these things are known. His grandchildren are all more than 65— are already drawing old-age pensions. Some of his children are nearing the century mark. Records at the Indian agency office in Riverside show that Louis was already an oldtimer when the names of Indians were registered 75 years ago. And Jim Toro, who died five years ago well past the 100-year mark, always said that Louis was many years his senior.

In any event, the chief is still alert and unusually active, but is beginning to need a cane to get around. He thinks it is about time for him to take leave of his family. —*Palm Springs News*.

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Fish Planted in Salton Sea . . .

EL CENTRO—If a recent experiment proves successful, there will be salt-water sport fishing in the below-sea-level Salton Sea before long. More

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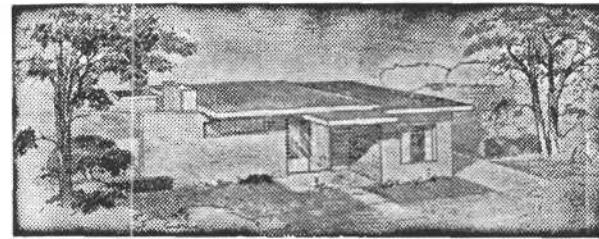
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than 200 game fish taken from the Gulf of California in the vicinity of San Felipe, Lower California, have been planted in Salton Sea. The experiment is a joint venture of the Federal Bureau of Marine Fisheries, Imperial Valley Fish and Game Conservation association, Southern California fish hatcheries and the California Fish and Game Commission. Prior to planting the larger fish, 5000 anchovete were placed in the sea to provide fish food.—*Imperial Valley Press*.

Record Death Valley Season . . .

DEATH VALLEY—When the official travel season closed as summer's heat came to Death Valley, a record 185,012 visitors had been registered by rangers of Death Valley National Monument. This figure is nearly 16 percent greater than last year's 162,000, a previous record. Rangers have moved their headquarters from 125 feet below sea level to cooler Wildrose Canyon, at an elevation of 4000 feet. They still patrol the Monument in the summer, from time to time rescue a lost tourist who has ignored the rules of desert summer exploring. Official travel season for Death Valley is October to end of May. This past season 1464 of the visitors came in 500 planes.—*Los Angeles Times*.

Fishing on the Desert . . .

INDIO—The California state public works board has approved an appropriation of \$32,500 for construction of three fishing lakes in Coachella Valley, a project which previously had been approved by Riverside county supervisors. Water for the lakes will come from the Colorado River through the Coachella branch of the all-American canal. The lakes may be open to fishing in 1952, if the project goes forward without a hitch.—*Palm Springs News*.

Ghost Town Needs "Aging" . . .

BARSTOW—The ghost town of Calico, although its buildings were abandoned in 1896, doesn't show its age enough for motion picture purposes. At least when a picture company went on location there recently a special effects painter was rushed to the site to "age" the buildings with paint.—*Barstow Printer-Review*.

INDIO—Kenneth Lichy was unanimously elected president of the board of directors of the California Date Growers association at its last meeting. Other officers: Ted C. Buck, vice president; E. V. Gillespie, secretary; James Proctor, treasurer.—*Indio News*.

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Coachella Canal Fund Short . . .

WASHINGTON — Although the appropriations committee has approved an item of \$750,000 for continuation of work on the Coachella branch of the all-American canal, which runs along the west side of Salton Sea bringing Colorado River water to California's Coachella valley, the fund is not sufficient to complete the branch even if congress follows the committee recommendation. The \$750,000 would be part of a \$625,000,000 deficiency bill, would be used to make payments previously authorized by congress during the fiscal year which ended June 30.

Work on the west-side section of the canal stopped in April when the contractor ran out of pipe and the Interior Department notified the firm that available money was exhausted.

Famed Resort Hotel Sold . . .

PALM SPRINGS—Main building of the former El Mirador Hotel, luxury hostelry prior to the war, has been sold for \$800,000 to Lloyd Gardiner and Irwin Franck of Washington, D. C. The two men are former servicemen. The famed hotel was converted during the war into a hospital, has been operating in recent years as the Palm Springs Community hospital. It is understood the purchasers will convert the building back into a hotel.—*Banning Record*.

Plaque Marks Historic Spot . . .

COYOTE CANYON — A bronze plaque marking the approximate birthplace of California's first white child has been erected in remote Coyote Canyon, the rugged defile followed by Capt. Juan Bautista de Anza and his party of colonists as they left Borrego Valley on their way to San Gabriel Mission, Monterey and San Francisco. The plaque was dedicated by officials

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THE **Desert** MAGAZINE
PALM DESERT, CALIFORNIA

of the California Centennials Commission and the Roads to Romance Association.

It was on Christmas eve, 1775, that Senora Gertrudis Linares gave birth to a son, Salvador Ignacio Linares. The infant was baptized next day at a spring by Father Pedro Font. It was Anza's second overland trip from Mexico to California. The first had been to blaze an overland trail, the second was a colonizing expedition.

The plaque is located about 15 miles up Coyote Canyon, down which a year-around stream runs to lose itself in the sands of Borrego Valley.—*Los Angeles Times*.

NEVADA

Reservoir Named Lake Mohave . . .

DAVIS DAM—The reservoir being formed by Davis Dam on the Colorado River has been officially named Lake Mohave. The United States senate has passed a bill designating the reservoir by the name favored in a bill introduced by Senator George W. Malone, Nevada. The new reservoir (*Desert*, May, 1950) will eventually extend 65 miles upstream to within two miles of towering Hoover Dam. Davis Dam is being built both for water storage and power development.—*Pioche Record*.

Famed Railroad Makes Last Run . . .

CARSON CITY—The historic Virginia and Truckee railroad, whose gay yellow coaches once hauled such dignitaries as President Ulysses S. Grant and the financial greats of the world, officially went out of business May 31. Built during the heyday of the Comstock Lode mining boom in the Virginia City area, the shortline road played an important part in Nevada's early development starting 81 years ago. For the past several years it has been operating at a loss.—*Humboldt Star*.

New Cereal Being Tested . . .

PARADISE VALLEY—Discovery that a weed growing locally, which seemed palatable to cattle, was a wild variety of a cultivated cereal grown by Indians in the mountainous regions of Central and South America, has raised hopes that Nevada may have an entirely new industry.

The cereal is known as quinoa, is extremely high in protein and food value. It is a diet staple for both humans and animals in Central and South America. Discovery of the wild

variety in Paradise Valley was made by E. Reeseman Fryer, superintendent of the Indian agency at Stewart. Seed of the domesticated quinoa was obtained from the U. S. embassy at Quito, Ecuador. John U. Birnie at the Old Mill ranch in Paradise Valley has started an experimental seed bed and hopes are high for success of the project.—*Battle Mountain Scout*.

• • •

Newspaper Starts 88th Year . . .

AUSTIN—In the days when trains of covered wagons were pushing their way across the plains, when outcome of the Civil War was in doubt, with General Lee gathering his forces for invasion of the North, when Virginia City was the metropolis of Nevada and when Austin—destined to soon become Nevada's second city — was barely two months old, the Reese River Reveille was born. It made its appearance along with numerous other newspapers in Virginia City, Gold Hill, Carson and in other towns and mining camps over the state. But of them all, only the Reveille remains. It is the only existing Nevada paper published in territorial days. In its 87 years it has never missed an issue. It is now starting its 88th year in Austin, which grew at one time to more than 10,000 population, is now down to about 300.

—*Reese River Reveille*.

State Fair Dates Set . . .

FALON—The Nevada state fair committee has set the dates of September 1, 2, 3, and 4 for the annual state fair which will be held in Fallon. Improvement of the grounds is being considered.—*Fallon Standard*.

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Hard Rock Shorty of Death Valley



The dude who had just arrived at Inferno store was looking for a guide.

"Well, I guess I could take you over most o' this country," Hard Rock Shorty told him. "Been prospectin' these hills bout 40 years an' I know most of 'em purty well."

They made a deal and Shorty sent Pisgah Bill up to the pasture on Eight Ball creek to bring in the saddle ponies and a couple of pack animals.

The stranger began asking questions and kept it up all day. Why was this and what was that? By the time they made camp that night Hard Rock was tired and disgusted.

Just before dark the dude pointed to an odd-shaped pinnacle silhouetted against the sky, and wanted to know what that was.

"Huh!" exclaimed Shorty. "That's a petrified Indian."

"But Mr. Hard Rock, how could an Indian become petrified in that position?"

"Holy blazes, man, how do I know? I ain't no scientist." Shorty was losing his patience.

"And what's more, if you'll climb that ridge to where the Indian is you'll find he has a bow in his hands, an' it's petrified too. An' over across the canyon from him you'll find a petrified deer—an' half way between the Indian an' the deer is a petrified arrow. The injun'd shot at the deer, an' they was all petrified on the spot."

The dude thought it over for a minute, an' then he got a bright idea.

"But how about the law of gravity?" he asked.

"Oh shucks, I guess she was petrified too!"

Fishing Controversy Unsettled . . .

LAS VEGAS — No progress was made on the proposal to place a \$2 stamp on out-of-state licenses for fishing on the Colorado River when Arizona Game and Fish commissioners and five executive commissioners of Nevada met recently at Las Vegas. Nevada commissioners rejected the idea because they do not want to charge visitors the extra two dollars. As a result, boundary rules on the Colorado will be enforced by Arizona. Recognized boundary of the river is the exact center.

The recent controversy between California and Arizona over the same problem — which followed arrest of many California fishermen by Arizona officers — was settled when California accepted the same proposal. But the California legislature must approve the action. The plan calls for a \$2 stamp to be affixed to the fishing license of each state, which would allow purchasers to fish in another state on the Colorado River. — *Mohave County Miner*.

Water Supply Said Ample . . .

FALLON — In contrast with many other parts of the arid Southwest, storage in Lake Lahontan has gained rapidly since advent of warm weather and there will be an ample supply of water for irrigation. Melting snow and precipitation in the mountains has filled the lake. — *Fallon Standard*.

Fire Destroys Landmark . . .

RENO — The 75-year-old single stall roundhouse of the historic Virginia and Truckee railroad, which has just abandoned operations forever, has been destroyed by fire. The blaze started when flaming oil overflowed from the firebox of Engine 17, one of the two old-fashioned locomotives left on the famous 50-mile short line. — *Battle Mountain Scout*.

Unique Desert Industry . . .

IMLAY — A unique industry is thriving at Imlay. It is a worm farm. Owned and operated by Mr. and Mrs. W. C. Love, the "industry" is only three years old, it grew out of the fact that Love had been "fooling around with worms for a long time." Now he ships them all over the nation. This spring business was slow, he said, but still he was shipping 10,000 worms a week. He has about 15,000,000 worms at his farm. The worms are raised in boxes 16 x 2 feet, in the winter are kept in pits. The worms are used by farmers, by home gardeners for flower beds and vegetable patches, by fish hatcheries. They are shipped to the East in special cardboard boxes packed with moss. — *Humboldt Star*.

NEW MEXICO

Vital Water Project Started . . .

ALBUQUERQUE — A quarter-century struggle for flood control and water conservation in New Mexico has finally brought tangible results with signing of contracts for first units of the Middle Rio Grande Flood Control and Reclamation project. Designed to eventually harness the wandering Rio Grande from Espanola in Rio Arriba county to headwaters of Elephant Butte reservoir in Socorro county, the entire project will cost \$73,000,000. Contracts already signed cover only work on the 7-million-dollar Jemez River dam and reservoir in Sandoval county, 20 miles north of Albuquerque.

The dam will mean not only flood protection to growing Albuquerque and to towns, villages and farms along the 180 miles of the middle valley, but will eventually return to production many acres of once productive farm land, and will provide a more constant water supply for other lands. The Santa Ana Indian pueblo, which is within upper limits of the Jemez reservoir, will be protected. — *El Crepusculo*.

Navajo Leader, Missionary Dies . . .

SHIPROCK — Rev. Jacob C. Morgan, chairman of the Navajo Tribal council for four years, a recognized leader and a missionary, died May 10 at Shiprock where he was pastor of the Navajo Fellowship church. He had been a member of the Tribal council for 20 years. Reverend Morgan was ordained to the ministry in 1944 after helping in religious work and teaching music to the Indians and working as a carpenter. He is said to be the first Navajo ordained by his church. — *Gallup Independent*.

Bad Fire Season Forecast . . .

TAOS — The government is prepared for a "pretty grim" fire season in New Mexico and Arizona, and certain areas of National Forests may be closed to campers this summer because of the fire hazard. Supervisor Louis Cottom of Carson National Forest said large areas of the preserve will have to be protected by keeping out picnickers and campers.

Bureau of Land Management officials in Washington predicted that this summer will be much worse than 1949 when 177,000 acres of range and forest lands were burned over by 1054 fires. In the New Mexico-Arizona region, with headquarters at Albuquerque, a prolonged drought has made the situation critical. Most fires are still caused by man, although last year 370 fires were caused by lightning. — *Tucson Daily Citizen*.

Irrigation Water Supply Short . . .

LOVINGTON — The outlook for irrigation water for 1950 on the Rio Grande and its tributaries is not favorable, according to the federal Soil Conservation Service. On the Rio Chama and west of the Rio Grande in northern New Mexico the snow cover was about 60 per cent of normal this spring. East of the river in the Sangre de Cristo mountains, the April 1 snow cover was less than for any year since snow surveys were started in 1937. Precipitation during the fall and winter months was deficient, soil moisture in irrigated areas is poor.—*Lovington Press*.

Rio Grande Water Rationed . . .

ALBUQUERQUE — The Rio Grande is at one of its lowest stages in many years following a year of below-normal rainfall and snow, and water is being rationed more closely this summer than ever before.—*Gallup Independent*.

Taos Newspapers Merged . . .

TAOS — The newspaper *El Crepusculo* has taken over all assets of the Wells Publishing Company, publisher of the *Taos Star*, and publication of the *Star* has been discontinued.—*El Crepusculo*.

UTAH

Placed in Hall of Fame . . .

ST. GEORGE — First Utah personality to be placed in the national Hall of Fame is Brigham Young. His statue was unveiled June 1 in the rotunda of the national capitol. The bronze bust of the great Utah colonizer is the work of Mahonro Young, sculptor. He is a direct descendant of the state's founder. Date of the unveiling was anniversary of the birth of Brigham Young.—*Washington County News*.

Too Many Deer on Range . . .

MOAB — Hunters in many areas will find this hard to believe, but a deer and range survey on the eastern slope of the La Sal mountains in Utah and Colorado revealed that range conditions were bad, evidence of too great a concentration of deer. Utah, Colorado and federal officers made the survey. There are too many deer on north end of the La Sals also, the group found. Utah officials made a trip to the Cunningham ranch in the Book Mountains where a special hunt was staged last fall and more than 500 deer of both sexes taken in a small area along Nash wash. Despite this special hunt, there is still an extreme concentration of deer in that area, more than the range can carry. A joint control plan is to be worked out.—*Moab Times-Independent*.

May Develop 'Wonderland' . . .

PANGUITCH — A start on development of the "Wayne Wonderland" in Capitol Reef National Monument is to be made with a small appropriation recently announced by Sen. Arthur V. Watkins. The monument was dedicated in 1937, but little development work has been done to open up the area so that visitors from all over the nation may enjoy it. The Associated Civic Clubs of southern and eastern Utah have been working to get the Park Service to develop the region.—*Iron County Record*.

Brigham City Is Brigham City . . .

WASHINGTON — Brigham City has at last been officially named Brigham City. The postoffice department, which had clung to just plain Brigham despite the fact that the community had long been known as Brigham City and had been so listed by Western Union and the telephone company, finally changed the town's name. Frequent mail mix-ups resulted from similarity of Brigham and Bingham, residents complained in asking the change.—*Salt Lake Tribune*.

Locale for New Picture . . .

MOAB — A new western motion picture, "Rio Bravo," is being filmed in Castle and Professor valley, up the Colorado river about 15 miles from Moab. It is the same general region where "Wagon Master" was filmed. Director-producer is John Ford. More than 100 saddle horses and 160 local people are being used in the production.—*Times-Independent*.

Trout Feel Boom Psychology . . .

FISH LAKE — Trout in Fish Lake are keeping pace with the post-war production boom, doing their best to keep anglers smiling. Production of trout eggs, which fell off to practically nothing following peak years more than a decade ago, is on the upswing again. The trout output this year at the Utah fish and game department egg-taking station will be the highest in 10 years.—*Salt Lake Tribune*.

VETERAN OF FEDERAL SERVICE IS NEW INDIAN COMMISSIONER

Replacing James R. Nichols who had filled the post for only a few months, Dillon S. Myer of Ohio in May took office as Commissioner of Indian Affairs. He was appointed to the post by President Truman.

Dr. Nichols was selected by Interior Secretary Oscar Chapman as a special assistant to study the problems involved in the administration of Pacific Islands which came under the jurisdiction of United States during World War II.

Myer is a veteran in the federal service, having been assistant chief of the Soil Conservation Service from 1938 to 1941 and administrator of Agricultural Conservation in 1941 and 1942. During the war he was director of War Relocation Authority. In 1946 he was made Commissioner of Federal Public Housing Authority and more recently was president of the institute of Inter-American Affairs.

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AMATEUR GEM CUTTER

By LELANDE QUICK, Editor of The Lapidary Journal

An event of great significance to the amateur gem cutters of America occurred May 22. At that time the corporation papers, constitution and by-laws of the American Gem & Mineral Suppliers Association were approved by directors elected by the dealers exhibiting at the Mineralogical Federations' meeting at Sacramento June 26, 1949. This was the final result of a year's labor and extensive correspondence on the part of the temporary chairman, Thomas S. Warren, president of Ultra-Violet Products, Inc., of South Pasadena, Calif. Mr. Warren was elected president of the new association with Lowell Gordon of Long Beach as secretary and myself as treasurer. To clear misunderstanding already existing, and to forestall additional misunderstanding, we offer the set-up and purposes of the new association.

If it is wise for ditch diggers and lawyers to organize associations to protect their own interests and to regulate their own people it is wise to organize the gem and mineral dealers of America who are catering to America's third largest and fastest growing hobby. Among other things many of the dealers feel that they have been abused in the past by unfavorable publicity and that they have been pushed around at conventions and by societies. By organizing they believe they can present favorable publicity and protect themselves from a lot of abuse that has existed heretofore.

What abuse? An example is in order. Dealers are asked to rent space at shows. They close up their establishments on which they pay rent, taxes and plenty of overhead and then donate prizes for illegal raffling. They arrive at the show and a dealer sells a gem stone for \$10.00 on which he collects the unpopular but still legal 20% tax. Soon the purchaser returns to his table and demands her money back because she has subsequently purchased three other gem stones from three other dealers who collected no tax. After a lot of wailing in front of the other customers, who get to think this dealer is a crook, she gets her money back. An inquiry by the abused dealer develops that the other boys claim they absorb the tax and anyway tomorrow they are back at their carpenter's jobs and no longer in the gem business. This situation actually happened at a recent show. It will never happen again because members of the new gem and mineral dealers association will see that everyone claiming to be in the business is measured with the same stick whether or not he happens to be an association member. And then by a strong association dealers can bring more pressure to bear to see that the present inequities of the excise tax law are corrected.

All members of the new association will have to subscribe to a code of ethics which will appear on the walls of their establishments. This code, formulated by the Federal Trade Commission, prevents members from misrepresentation as to the character of their business (claiming to be an importer when they do no importing at all); misrepresentation of products as to quality, size, etc.; deceptive marking and branding of merchandise; fictitious pricing; misuse of the terms "real" and "synthetic," etc. Violations of this code of business morality will place the offender in a position where he will have to defend his actions before

the association. All honest dealers in the business will not join the association so that it would be unfair to imply that those who do not belong are unworthy. On the other hand those who do become members will only be taken in after an examination of all the facts and their acceptance as being worthy.

What does all this mean to the amateur gem cutter? It means that he can purchase his materials from advertisements that offer an assurance of fair and honest treatment by consulting those offers in which the official association seal appears. For if there is any complaint that is not handled to his satisfaction he has someone to complain to who will do something about it rather than having to appeal to a helpless editor who can wield no authority other than refusing the advertiser's messages in the future.

If you travel across the country and enter a strange town looking for an auto court you wisely try the one displaying the AAA sign first because you know that they have to meet a standard that satisfies you. When you seek a place for your dinner, after checking in, you naturally favor one that your guide book tells you is certified by Duncan Hines. In time to come the display of the new association's emblem in members' ads and the code of ethics in their stores will mean just as much to you — an endorsement of the dealer by his own peers.

In recent months we have heard some comments about the new association being formed to "raise all the prices on everything." That is silly. One of the laws of the land most rigidly enforced is the law that prevents collusion and price fixing. It would indeed be simple for the leading men in a business to organize an association for the sole purpose of evading the laws of the land. We have heard another criticism to the effect that the dealers intend to see that no more people get in the business. That is silly too for if a man wants to enter the gem and mineral supply business under our free enterprise system he now has an organization that will help him, through its members, to get foreign materials, fair discount arrangements with manufacturers of equipment, adequate help and information on every phase of his business. He will no longer have to get his fingers burned many times and perhaps lose his life savings just because he didn't quite know the score. Association membership will give him news and market information through bulletins that will guide him in the right channel.

The association has the names of almost 600 individuals and firms catering in some way to the mineral collecting and lapidary hobbies. Many of them will never be eligible for membership; many who are eligible will never join. But within the next year it is anticipated that at least 200 of them will be banded together in the new organization to keep the business clean, honest and aggressive in the interests of the people they serve. There are few people who have not been gypped at some time by some dealer in whom they had confidence. It will still happen but it won't happen as much. When it does happen the trusting amateur now has a place where he can take his case. This new association is a great thing for the lapidary hobby. Give it a chance and watch it with interest.

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Gems and Minerals

NEW OFFICERS INSTALLED BY SAN JOSE SOCIETY ...

New officers of the San Jose, California, Lapidary society were installed at the June meeting with R. M. Addison taking the president's chair. Other officers: Dr. Gordon Helsley, vice president; I. J. Brodell, secretary; A. Tihonravov, treasurer. It was reported at the meeting that for the second year Al M. Cook had won the Grand Award for his case of flats and cabochons displayed at the fifth annual gem exhibit held by the San Jose society April 23 and 24. Nearly 8000 persons attended the two-day show. A transparency display consisting of thin-sectioned stones illuminated by a transmitted light attracted much comment. There were 50 cases containing the individual work of members.

NEW MEXICO CLUB HELPS ORGANIZE JUNIOR GROUP ...

The Mesilla Park Pebble Pups club has been organized at the Mesilla Park school with the help of Mildred Sanders, member of the Dona Ana County, New Mexico, Rockhound club. Forty youngsters enrolled as enthusiastic members. Officers elected: Eugene Ward, president; LaVona Mae Duke, vice president; Almalita Fox, secretary and reporter. Mrs. Sanders is adult sponsor of the new club.

There were two interesting May meetings for the Northern California Mineral society, San Francisco. On May 9 members brought specimens of volcanic rock and Wilhelm Haedler furnished a display from his collection. There was a discussion on the origin and formation of volcanic rock. At the May 17 library meeting Roy Walker, professor of ceramics and jewelry at San Francisco City college, was the speaker. His topic: "Minerals in Ceramics and Jewelry." This was the last library meeting until September.

After an unusually cold winter, the Seattle, Washington, Gem club "came to life" as soon as spring began to make itself felt. At the March meeting new officers were elected. They are: Paul Soll, president; Mrs. Nathan Smith, vice president; Mrs. Mary Peak, secretary; Mrs. R. C. Goodman, treasurer; Roy H. Allen, new member of the governing board. Lapidary and jewelry groups of the society were active during the winter, and now that summer is here outdoor phases of the society's activities are in full swing.

A big party, which included a gem and mineral show and auction, was principal event on the calendar for the East Bay Mineral society, Oakland, California. At the May 18 meeting new officers were to be elected.

THIS MAY BE RECORD: CAN IT BE TOPPED?

Fifteen years as president of the Mineralogical Society of Arizona, Phoenix, has come to an end for Arthur L. Flagg. When society elections were held May 5 Flagg declined the nomination. Flagg is an experienced mining engineer, his work in the society was termed invaluable. He has done outstanding work also among school-age youngsters, developing in many a real interest in mineralogy.

New officers are: M. J. Benham, president; Jim Blakeley, vice president; Arthur Flagg, Floyd Getsinger, Ben Humphreys and Louis Loerzel, elected to board of governors. A secretary-treasurer was to be appointed later.

An outstanding collection of cut and uncut gems and minerals is being displayed by the San Diego Mineral and Gem society at the San Diego County fair, Del Mar, California. Dates of the fair are from June 29 to July 9 inclusive.

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The Glendale Civic auditorium was site of a highly successful show May 20 and 21 when the Glendale Lapidary and Gem society put on its third annual gem show. Minerals, gems, jewelry and fluorescents were displayed, cutting, polishing and faceting were demonstrated. There was no admission charge.

Site of the 1950 convention of the Northwest Federation of Mineralogical Societies in Spokane, Washington, will be the armory, 202 West Second avenue, and the dates will be September 2, 3 and 4, it is announced by Paul N. Brannan, convention chairman.

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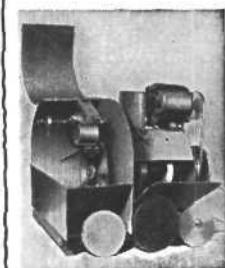


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DOUE TO POOR HEALTH I am going to sell my place on Highway 101. Excellent location. Everything goes, stock, equipment, Indian relics. Sell by inventory. Write to Jake's Mineral and Rock Shop, Route 2, Box 14, Gilroy, Calif.

AMONG THE ROCK HUNTERS

CANADA'S CYPRESS HILLS DESCRIBED FOR ARIZONANS

In southern Alberta, Canada, lies a strange land where time is turned back 15,000 years. It is a tableland of 88 square miles known as the Cypress hills. The great Keewatin glacier of the last ice age separated as it reached this 4700-foot plateau, passing around it and carrying into oblivion everything that lived.

A resume of the history of this "island in the great glacier" was given by Ben Humphreys, of Cashion, at a recent meeting of the Mineralogical Society of Arizona, Phoenix. Animal life alien to other parts of Canada is found in the Cypress hills—horned toads, kangaroo rats, scorpions, rattlesnakes, black widow spiders and other forms of life peculiar to the desert and the tropics. The flora is similar also to the desert areas of the Southwest.

The area is one of the world's richest sites of dinosaur remains. First to vanish after the great glaciers swept the country were the dinosaurs. Mastodons survived longer. Saber-toothed tigers, elephants and the rhinoceros clothed themselves in fairly thick fur, but eventually they too vanished. Fossilized scorpions of the Jurassic and Cretaceous periods—approximately 100,000,000 years ago—are little different from those of the present day.

The Sacramento Mineral society will have a home of its own if plans already approved can be carried out. Organization of a building association has been approved, this association is authorized to acquire funds and property for the purpose of providing a clubhouse for the society.

May field trip of the San Gabriel Valley (California) Lapidary society was an easy one—members attended the Glendale Lapidary and Gem society's annual show May 20 and 21. The society now has 48 paid-up members.

Over the weekend of May 27 and 28 members of the Searles Lake (California) Gem and Mineral society took a field trip to Hoose Canyon, where they found green and pink lace agate as well as various arids of moss agate.

An overnight field trip is planned July 8 and 9 by the Rand District Mineral and Gem association, which is keeping up its outdoor program right through the summer. The July trip will be to Bull Run basin on Greenhorn Mountain. August and September trips are also planned.

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WANTED rockhounds, gem cutters and mineral collectors to try our diamond sawed Arizona agate at \$1.00 per slab. Comes in many colors and combinations of colors and designs. Approval orders now filled. All agate guaranteed to have fine silica base. Mines are about 40 miles north of Cave Creek, Arizona. Agate Mines, Cave Creek, Arizona.

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HAROLD T. HOFER HEADS COLORADO MINERAL SOCIETY

Harold T. Hofer, Denver, is the third president that the Colorado Mineral society has had in its 14 years. He was unanimously elected at the society's 14th annual meeting May 5 at the Denver Museum of Natural History. President Hofer succeeds Prof. Richard M. Pearl of Colorado Springs, co-founder of the society, who served two terms. The new president and Mrs. Hofer edited the society's monthly bulletin for the past two years. James Hurlbut, who led the society's expedition to Mount Antero last summer (*Desert*, Dec. '49) was elected second vice president. Reelected to office were: Ray W. Thaler, vice president; Mrs. Jeannette Haralson, secretary-treasurer; Mrs. C. R. Williams, corresponding secretary.

Joining with the Rockology classes of the adult night school, members of the Coachella Valley (California) Mineral society went on an overnight field trip May 20 and 21 to the Mojave desert for fire opal. The adventurers took bedrolls, food for two days, rock tools and canteens. In April 23 adults and eight children went on the field trip to Windy Hill for geodes. For a June field trip members of the society were expecting to visit a tourmaline and beryl mine at Pala.

The Delvers Gem and Mineral society, Downey, California, enjoyed a recent program put on by Albert Hake. He showed his rock transparencies, thin slices of agate and other materials made up into slides and projected onto a screen—bringing out amazingly the color and design of the formations. Most recent field trip was to the Goffs area.

The Tacoma Agate club, Tacoma, Washington, continues to grow. It now has 127 members, many of whom are expert at cutting and polishing and in jewelry work. Regular meetings of the club are the first and third Thursdays of each month at St. Johns Parish house, 58th and South Puget Sound avenue, South Tacoma.

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NEW HANDBOOK ON FLUORESCENTS ISSUED

Jack DeMent, research chemist and head of the Fluorescence Laboratories in addition to being associate editor of *The Mineralogist*, can lay claim to being that rare combination—scientist and writer—for he has taken the technical subject of fluorescent gems and minerals and made the subject fascinating to the layman. DeMent is author of a new practical guide for the gem and mineral collector, *Handbook of Fluorescent Gems and Minerals*, in which he gives a wealth of technical information—but in easy-to-take doses.

The author explains that his handbook was not written for the specialist only, nor has it been reduced to the hobbyist's level of interest. Rather, the work is an attempt to present information in a way that will satisfy the needs of both specialist and student.

This approach is carried out throughout the booklet. The author distinguishes between "gems" and "minerals" believing that some are interested in one topic, some in the other. The specialist, for instance, will find detailed spectroscopist data, compositions, theory. The student and hobbyist will find much information of use in helping to build and maintain a collection of luminescent stones.

The Handbook is divided into three chapters: Radiation Sources and Technique; The Fluorescent Gems; The Fluorescent Minerals. It offers also a check list of luminescent minerals arranged by color and abridged bibliography.

Published by the Mineralogist Publishing Company, Portland, Oregon. Paper cover, 68 pp. \$1.50.

*This book may be ordered from
Desert Crafts Shop
Palm Desert, California*

A weekend field trip to Quartzsite, Arizona, provided a big May outing for the Long Beach, California, Mineralogical society. Members were looking primarily for quartz crystals.

NORTHERN ILLINOIS CLUB RAPIDLY FORGING AHEAD . . .

What can be accomplished in four short months is shown by the progress made by the Earth Science Club of Northern Illinois, Downers Grove, near Chicago. In May the club was able to report it had 78 paid-up members, a constitution, by-laws, a distinctive insignia, a bulletin, a full staff of officers—and a fine series of lectures and field trips planned. Its boast is that in the short period since its organization the club has become "one of the finest in the Midwest."

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**SUMMER SHOW ANNOUNCED
BY OREGON SOCIETY ...**

The North Lincoln Agate society will open its eighth annual agate show at 10:00 a.m. Saturday, July 29, in the basement clubroom of the Delake, Oregon, postoffice building. The exhibit will close at 6:00 p.m. Sunday, July 30. There will be amateur and commercial displays featuring materials from the costal region as well as from all over the world. Fluorescent, transparency and cabochon displays will be other features of the show.

• • •

Members of the San Gorgonio Mineral and Gem society, Banning, California, are looking forward to an out-of-the-ordinary field trip in July. The society has been invited to the summer home of Mr. and Mrs. Cap Toenjes at Lake Arrowhead in the mountains. The host says to bring picks and shovels. The guests don't know whether they will be put to work leveling the yard, or will be shown where to find some exciting rocks.

**SANTA MONICA SOCIETY
INSTALLS NEW OFFICERS ...**

Annual dinner and installation of officers featured the May meeting of the Santa Monica Gemological society. New officers are: C. E. Hamilton, president; Vern Cadieux, first vice president; W. R. B. Osterholt, second vice president; Ed Oatman, treasurer; Mrs. John C. Baur, Jr., recording secretary; Mrs. Harley James, corresponding secretary. Mrs. James address is 1121 Via de la Paz, Pacific Palisades, California. A history of the first 10 years of the society was read by Cadieux, and there was an outstanding display of minerals, gems and jewelry, supervised by Mr. and Mrs. W. G. Russell. Social chairman in charge of arrangements was Mrs. Lefa Warth.

• • •

"The Growth of Crystals" was subject of an informative talk given by Mrs. Ella Arciniega at May meeting of the Gem Cutter's Guild, Los Angeles. Meetings of the Guild are held at the Manchester Playground, visitors are always welcome. At the June meeting Victor Arciniega spoke on "Inclusions in Gems."

• • •

Installation of new officers at a Saturday night banquet preceded the Silver Tea and exhibit held on Sunday, May 7, by the Sweet Home Rock and Mineral society, Sweet Home, Oregon. More than 300 attended the exhibit. Officers installed at the banquet were: John O'Malley, president; Mel Crawford, vice president; Mrs. Georgia Munts, secretary-treasurer.

• • •

The Orange Belt Mineral society gathered in Fairmount park, Riverside, California, for a picnic June 4.

• • •

The Tacoma, Washington, Agate club visited the Puyallup club, organized within the past year, on June 9. Clubs in the area belong to the Northwest Federation and visit at each other's meetings frequently.

• • •

A series of excellent programs were enjoyed by members of the Tucson, Arizona, Gem and Mineral society during May. Outstanding was the May 2 meeting when J. G. Streeter, president of the American Federation of Mineralogical societies, spoke to the society. Meetings are the first and third Tuesdays of each month in room 106, Arizona State Museum building, University of Arizona campus.

• • •

A colored motion picture entitled "Ghost Towns" entertained members of the Los Angeles Mineralogical society at their May meeting. The film sketched history of the towns of the Mother Lode country. Various methods of recovering gold were illustrated. May field trip of the society was to Horse Canyon for agate.

WYOMING GEM STONES

AGATES, large, select \$2.00 lb., slabs 30c each. Mixed Agates, all types 50c lb. Sweet Water Agate pebbles \$1.00 lb., same in select ones 50c each. PETRIFIED WOODS FROM EDEN VALLEY, Round limb wood, \$1.00 lb., not round at 25c lb. Agatized wood 50c lb. Agatized Turritella 40c lb. Green Jade and Black Jade \$1.50 sq. in. (cab thickness), black-green \$10.00 lb., olive colors \$9.00 lb., rough pieces as found \$2.50 each. BLOODSTONE (India) Grade A \$12.50 lb. Grade B \$7.50 lb.

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EDITOR DESERT MAGAZINE:

Please tell your rockhound readers that if they like the beauty of African Tiger Eye they will simply have to get some of our deep rich mahogany colored blanks. These blanks average about one square inch and I must sell at least 3 to a person for \$2.00 postpaid. These are really gem quality. If your reader is not a rockhound and would like a polished stone in this beautiful material, we can furnish it for \$3.50 in any size from 10x12 mm. to 15x25 mm. The federal government must have 20% additional on this deal. If you want the stone set in a ring we can furnish the complete ring and stone for \$9.50 plus 20% federal tax for a lady's ring, and \$11.50 plus 20% for a gentleman's cast sterling silver ring and stone.

We have some very fine Oregon Thunder Eggs and have taken all the gamble out of buying them. We cut a thin slice from the stone to expose the pattern and if it does not show good colors, streamers or plume we will not sell it. The price is 60c a pound in 5-lb. lots plus 35c postage. Just send along \$3.35 and you will receive some of the prettiest agate you ever saw.

Here are some specials. Selected Wonderstone slabs at 20c an inch, 10" average. Oolitic Pisolite (Leopard or Pea Stone) 10 sq. inches for \$1.50. Send 15c postage for either of the above. Any club that wishes may have sent to them for their selection a nice variety of cutting material. Purchase what they want and return the rest just to prove that we sell ...

ARTHUR BENNY



W. H. RUSSELL

CALIFORNIA CONVENTION MEMORABLE OCCASION

Setting a precedent for real outdoor rockhound meetings, the annual convention of the California Federation of Mineralogical Societies was held June 17 and 18 at Trona in the Mojave desert. Convention site was at Valley Wells, six miles north of Trona, where most delegates camped—many of them from Friday until Monday.

A feature of the convention was the large number of field trips conducted. Twenty localities were listed on the field trip program, and visitors could take their choice of any trip. There were local guides for every trip.

When the June desert weather got too warm for those not accustomed to it, they could take a dip in the huge swimming pool at Valley Wells. Host societies were the Searles Lake Gem and Mineral society, Mojave Mineralogical society and N.O.T.S. Rockhounds.

Officers elected in May were installed at the June 12 meeting of the Southwest Mineralogists, Inc. The officers: F. S. Trombatore, president; James Creighton, vice president; Marion Thomas, recording secretary; Beatrice Zehrbach, corresponding secretary; Cora Standridge, treasurer. On the board of directors, in addition to the above officers, are Mrs. Nettie Hake, Arthur Rich and Walter Shirey.

Various members of the Coachella Valley (California) Mineral society showed slides and movies as program for their May meeting. The pictures covered a wide variety of subjects. For the June meeting society members enjoyed a barbecue at Salton Sea, and held election of officers.

How to finish gem stones so they can be mounted without chipping or breaking was described and illustrated by "Clemente" at May meeting of the Los Angeles Lapidary society. May field trip of the society was to the Bullion Mountains, 30 miles north of Twentynine Palms, where adventurous "jeep-herders" of the group had previously located a good collection site.

Mrs. Beulah A. Gough, Long Beach, was guest speaker at May meeting of the Sequoia Mineral society, California. Mrs. Gough described points of interest she had visited in Alaska and illustrated her talk with colored slides.

The San Pedro Lapidary society is to hold its annual show July 15 and 16 in the community center of Banning Homes, San Pedro, California.

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CUTTING, HAND POLISHING OF OPALS DEMONSTRATED

Cutting and hand polishing of opals was the subject of a talk and demonstration given for the Sacramento, California, Mineral society May 26 by Frank Wilcox of the California School of Arts and Crafts, Oakland. Wilcox lost his left hand in an accident in 1946, has developed a simplified technique which proved to his listeners that expensive equipment is not essential in obtaining satisfactory results.

The society's May field trip into Calaveras County produced a type of travertine (tufa or calc sinter) that was nicely patterned and polished well. Crystallized talc and quartz crystals were also found.

• • •
A picnic dinner at Will Rogers park was the regular June meeting for the Oklahoma Mineral and Gem society, Oklahoma City. After the early dinner, T. K. Vance talked on "Calcite." The society's anniversary party was held on June 18.

ANSWERS TO DESERT QUIZ

Questions are on page 18.

- 1—Five acres.
- 2—Nogales.
- 3—Lost Dutchman mine.
- 4—Metate.
- 5—Creamy white.
- 6—Beaver.
- 7—Rubber-soled shoes.
- 8—San Gorgonio pass.
- 9—Blue.
- 10—Navajo reservation.
- 11—Notorious outlaw.
- 12—Nevada.
- 13—Ashfork.
- 14—Houserock Valley.
- 15—Mesquite trees.
- 16—Tree rings in roof timbers.
- 17—Recovery of chemicals.
- 18—Ashfork, Arizona.
- 19—Pecos.
- 20—Powell.

The Rocky Mountain Federation show at El Paso June 7, 8 and 9 took the place of the monthly field trip for the Dona Ana County Rockhound club, Las Cruces, New Mexico. The June 2 meeting at Mesilla Park school was given over to making plans for the show.

ANNOUNCEMENT

John W. Hilton has discovered a new gem deposit near Alamos, Sonora. The material ranges from a new type of phantom amethyst through several colors of garnet, garnet and amethyst groups, epidotes and varied quartz inclusions. He will be mining in Mexico for the summer but his shop will be open for retail and mail order business under the management of Joe Wright. Keep in touch with him to get in on any of Hilton's new finds. Orders and inquiries will be promptly answered on a money back guarantee.

WHILE THEY LAST

Amethyst phantoms sliced for cabochons. Every slice has a white edge, a six sided amethyst band and a hexagonal transparent quartz center. \$1.00 per slice post paid.

Brilliant little amethyst crystals, some double terminated and fine enough to be set in rustic silver, without cutting. These crystals are from the ancient Jesuit mines in "The VALLEY OF JEWELS" described by Hilton in Desert, June, 1947. New material, just arrived, 12 sparkling little crystals \$1.00 postpaid.

Blue agate geodes from Lead Pipe springs mine sawed in half to prove good content. Average 1½ inches 4 for \$1.00; 2½ to 3 inches 2 for \$1.00.

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Just Between You and Me

By RANDALL HENDERSON

ONE OF the theories advanced by archeologists seeking to explain why the prehistoric cliff dwelling Indians of the Southwest abandoned their well-built homes in New Mexico, Arizona, Colorado and Utah is that they were forced to leave by a prolonged drought. The tree-ring calendar seems to bear out this conclusion.

Modern man has done such a good job of developing his water resources that most of us are inclined to take it for granted there is plenty of water, and will always be an ample supply.

It was quite a shock then when the 8,000,000 people in the metropolitan area of New York were told last December that unless they conserved their water they would face a possible famine this summer. The New Yorkers responded loyally, and according to figures released on June 1 they had saved 55 billion gallons of water in six months.

What has happened in New York will happen in many other parts of the nation, and especially in the Southwest, sooner or later. Population is increasing much more rapidly than water supply. In some quarters there is confidence that science will find a way to reclaim sea water. But it hardly is conceivable that sea water will ever solve the water problem of Phoenix and Albuquerque and a thousand smaller towns in the inland Southwest.

The days of acute shortages can be postponed indefinitely if people in all the areas of limited water supply will learn what most desert people already know—that one can get just as clean in a bathtub a quarter full of water as in a full tub.

It is becoming increasingly important that thrift in the use of water be regarded as a virtue, and that unnecessary waste of water is a bad habit.

• • •

Representative John Phillips of California has sent me a copy of a bill he has introduced in Congress to re-open about 30 per cent of the Joshua Tree National Monument for mining.

This measure offers a new answer to an old controversy. For years the mining interests have sought to have the entire 824,340 acres in the Monument opened for prospecting and mining.

In 1945 Congressman Harry Sheppard introduced a bill proposing approximately the same changes in park boundaries as are included in the Phillips measure. Nearly one-third of the present park would have been thrown open for the prospectors. But the mining men were not

satisfied with part of a loaf—they wanted the whole thing. And in the end they got nothing, for the measure was defeated largely because of their opposition.

It has long been recognized by the National Park Service and by conservation groups that the east one-third of the original Monument is a mineralized area, and has little value for park purposes. The Sheppard bill was endorsed by these groups. Paradoxically, the mining organizations, who had most to gain by the revision in boundaries, were its most bitter opponents.

The Sheppard bill authorized an appropriation of \$215,000 to be spent by the Secretary of Interior in acquiring private lands—mostly Southern Pacific holdings—within the park boundaries. The Phillips bill omits any reference to these private lands. It is an unfortunate omission because the Southern Pacific has been keeping its lands intact for transfer to the park if and when such authorization is given by Congress.

The Phillips bill already has been approved by the Public Lands committee of the House. From the standpoint of those of us who have wanted to see Joshua Tree National Monument preserved and extended to include the checkerboard of private lands within its revised boundaries, it is not as good a bill as we had hoped to get.

Nor does it grant all the mining interests have asked. They would like to see the entire part opened for their exploitation.

Obviously, it is a compromise bill. I have not discussed the measure with Park Service men, nor with leaders in the fight to preserve the best in the Monument for park purposes—but I can see no objection to its passage as the bill is now written. It opens to miners the mineralized east one-third of the park, and preserves the Joshua forest and the fantastic wonderland of rocks in the western two-thirds as a playground for the thousands who like to camp and explore this gorgeous desert area.

• • •

The temperature in Palm Desert today is 112 degrees. But the things that live and grow on the desert are not perturbed by high temperatures. Some of the visitors who come here for the first time fuss and fume about the heat—but it really does not hurt them.

It is good for humans to live in zones where there is a wide variation in the temperature. It builds tough bodies—bodies that are more resistant to the ailments of a pampering civilization.

BOOKS OF THE SOUTHWEST . . .

BONANZA KING OF THE COMSTOCK MINES

During the period between 1860 and 1880 when the Comstock bonanza was yielding millions in silver and owners of the properties around Virginia City were growing fabulously rich, the names of three men became indelibly impressed in western history—James Flood, James Fair and John William Mackay.

The greatest of these was Mackay—not because he acquired greater wealth than the others, but because of his stalwart character, and the use he made of the fortune which came to him through the mines.

The story of John Mackay "Bonanza King" is well told in a new biography written by Ethel Manter, *Rocket of the Comstock*.

Born in Dublin, Ireland, in 1831, Mackay came to the Comstock as a hard rock miner. He was a good miner—quiet and unassuming, and a student of his job, and these qualities brought to him the financial backing which became the basis of a fortune.

In writing the story of Mackay, Ethel Manter has adhered closely to the facts of record. The continuity might have been smoother in places had she drawn on her imagination or the bridging of gaps where the records available to a researcher are vague. But such would not have improved the authenticity of the story. The author has written a worthy story about a worthy man, covering not only his biography as a miner but also as the financial giant who broke the monopoly which the Gould interests held on international cable lines.

Published by Caxton Printers. 256 pp. Halftone illustrations. \$5.00

HISTORICAL BACKGROUND CLARIFIES INDIAN PROBLEM

To understand the Indian it is necessary to understand where he came from and when and how. It is impossible to start 100 years or 200 years or even 400 years ago to find the answer to the riddle of today's redman. It is necessary to go back to the beginning.

In *They Came Here First* D'Arcy McNickle has attempted to do that. He has briefed the findings of archeologists and anthropologists and geologists into preliminary chapters which make sense to the average reader and give an outline of the economic, cultural and social development of the men who first peopled this continent.

Then McNickle reviews the discovery of the New World and sympathetically paints a picture of the changes wrought in the character and habits and personality of the Indian under the impact of European civilization and European exploitation.

D'Arcy McNickle was born on the Flathead Indian reservation in Montana of a French Canadian mother who was adopted into the tribe, and since 1936 he has been with the Bureau of Indian Affairs. So he writes from first-hand knowledge when the book moves into its concluding chapters—a discussion of Indian problems during the last century and what the federal government has attempted to do in more recent years to help solve the problems.

Published by J. B. Lippincott Company, New York. 300 pp with half-tone illustrations, plus extensive source notes and index. \$3.75.

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WHITE MEDICINE MAN WRITES ABOUT INDIAN MEDICINE MAN

Medicine men and their mysterious doings have fascinated humanity since the beginning of time. Dr. S. H. Babington, a practicing surgeon, tells in his book *Navajos, Gods, and Tom-Toms* the rites and methods used by Navajo medicine men as possibly only another "medicine man" might observe and relate them.

Dr. Babington was physician to a number of exploring and scientific expeditions into remote and little known Navajoland, the first of these expeditions being 20 years ago. On recurring expeditions since then he became intimately acquainted with the archeological background, the daily lives, the

rites, ceremonies and beliefs of the colorful Navajos. He had the good fortune to know and to be helped by John Wetherill, who played such a great part in gaining the confidence of a people who looked upon white men with reserve and suspicion.

After a rather tedious description of the start of his first expedition, Dr. Babington with the trained perception of a medical practitioner, details highly informative and interesting material on the artistic sand paintings of the Navajo medicine men, the ceremonies and chants and their meaning to the people to whom these men are still the most important members of their society. Dr. Babington shows none of the superiority of the modern physician toward his Navajo counterpart. He observes minutely, with understanding and respect. He points out that the ceremonies are symbolic, that the very herbs are used more symbolically than otherwise.

Dr. Babington admits that too often our doctors concentrate completely on the purely physical, "forgetting that they are handling human beings who also have psyches. The Navajo medicine men, on the contrary, concentrate on the psyche."

In the chapter on Rituals, Herbs and Tom-toms, Dr. Babington gives a list of herbs used by the Navajo medicine man with the ailments to be cured.

The reader senses throughout the book that the author's first interest is that of the physician. But there is a wealth of other information which serves to give a complete picture of life in Navajoland.

Published by Greenberg, New York, 246 pp. with bibliography and index, 41 Photographic illustrations. \$3.50.

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